

TECHNOLOGY DEPT.



The

Manufacturing Confectioner

with INTERNATIONAL CONFECTIONER

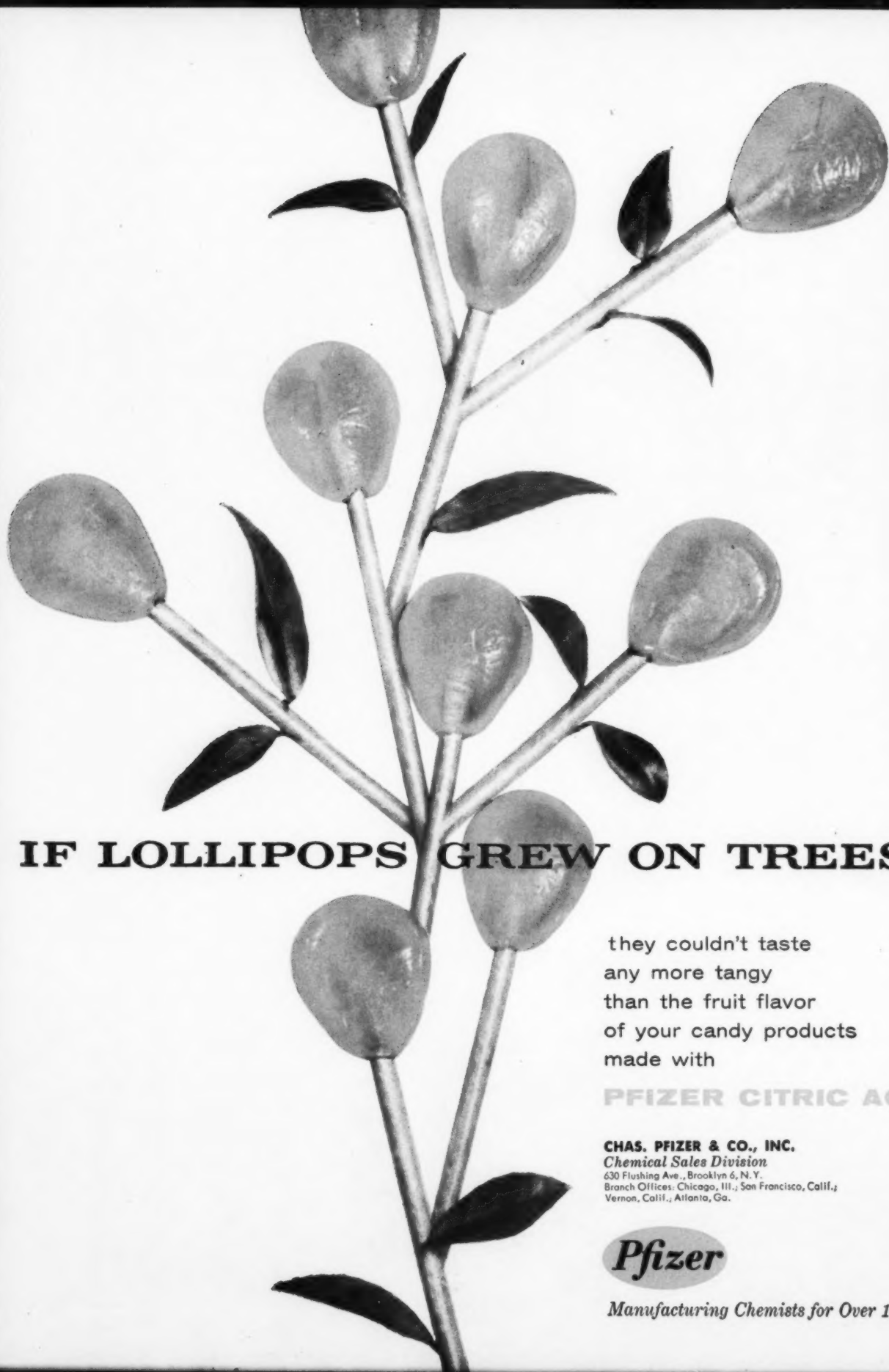


Vol 34
#4

PUBLIC LIBRARY
JUN - 3 1956
DETROIT

June
1956

Production Conference Report
The Hannover Fair



IF LOLLIPOPS GREW ON TREES.

they couldn't taste
any more tangy
than the fruit flavor
of your candy products
made with

Pfizer CITRIC ACID

CHAS. PFIZER & CO., INC.

Chemical Sales Division

630 Flushing Ave., Brooklyn 6, N.Y.

Branch Offices: Chicago, Ill.; San Francisco, Calif.;
Vernon, Calif.; Atlanta, Ga.

Pfizer

Manufacturing Chemists for Over 100 Years

S.

ACID

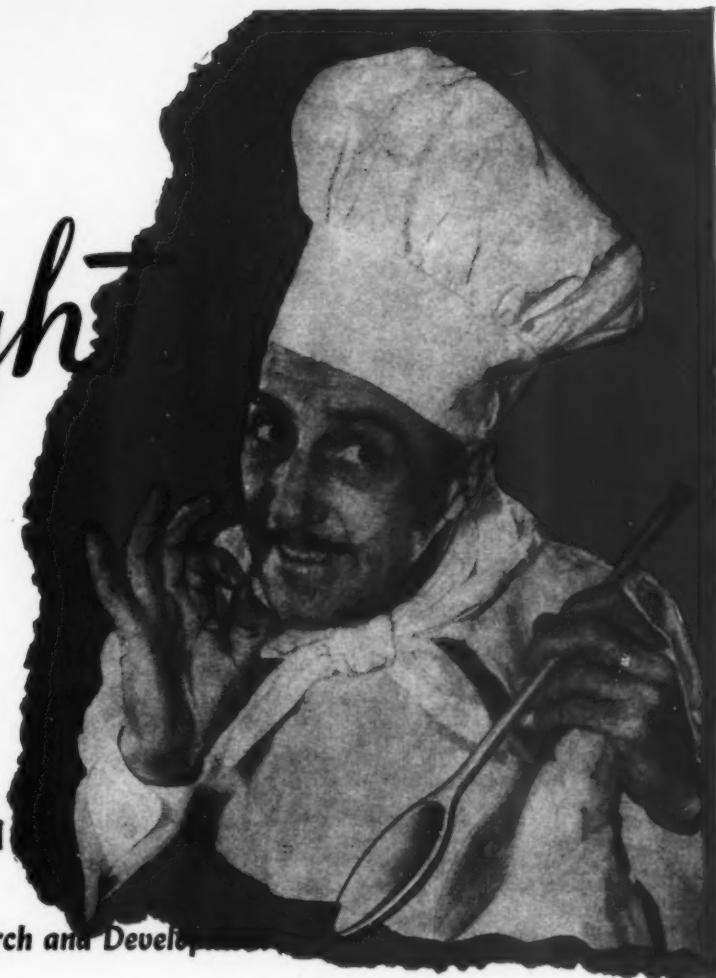
r 100 Y

Z

for J

Just Right

FLAVOR
and
AROMA
with
ZIMCO® VANILLIN



The Result of Long Research and Development



The finished product is delicious . . . it is "just right." Each of its ingredients is of superior quality . . . blended by a master with skill and experience into a harmonious flavor-perfect, taste-tantalizing food product.

ZIMCO, the *Original Pure Lignin Vanillin* has been helping to make food products "just right" for 16 years and is today recognized by the entire Food Industry as the top quality product and the standard by which all vanillins are evaluated. Ask the man who uses it.

Consult Your Flavor Supplier.

Sterwin Chemicals Inc.

SUBSIDIARY OF STERLING DRUG INC.
1450 Broadway, New York 18, N.Y.
2020 Greenwood Ave., Evanston, Ill.

WORLD'S LARGEST SUPPLIERS OF VANILIN

Hansella

PRESENTS:

AUTOMATION in COOKING

with

the 126

**automatic and continuous
dissolver**

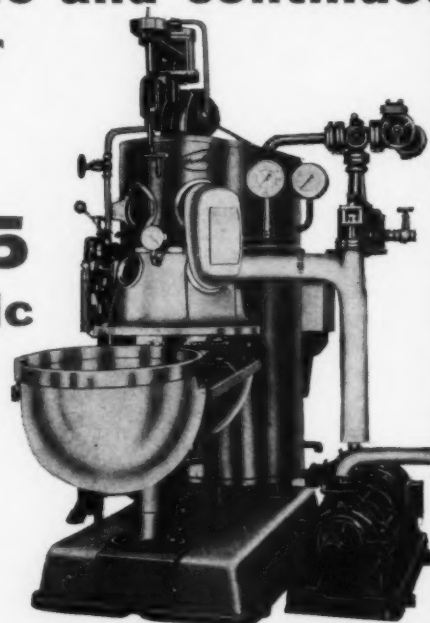
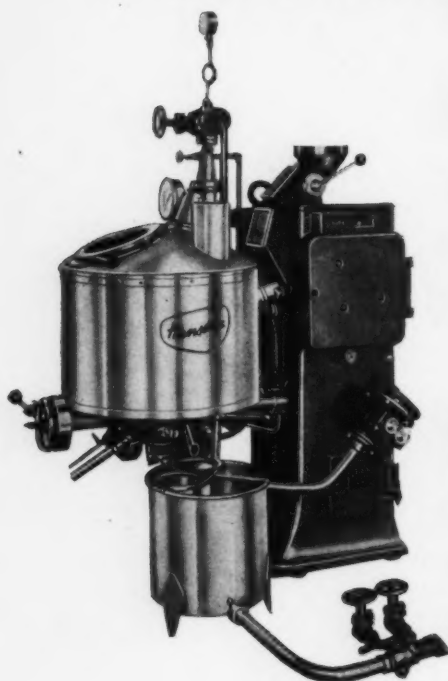
plus

the 145

automatic

ROBOT

cooker



This Hansella dissolver-cooker combination is so automatic in its performance, a single operator can supervise the entire cooking plant!

The 126 AUTOMATIC AND CONTINUOUS DISSOLVER is the only dissolver made that proportions a formula's ingredients, dissolves and preheats them, then adds the correct amount of cornsyrup or invert sugar — all done automatically and continuously! A patented and exclusive design feature protects automatically against syrup discoloration. As for output, the 126 is available in models with capacities of up to 3000 lbs. of syrup per hour (when using a 60% sugar/40% cornsyrup ratio). All models can be adapted for use with appropriate types of continuous cookers of other manufacturers.

The 145 AUTOMATIC ROBOT COOKER produces batches that are always light in color, low in inversion, and uniform in both quality and quantity. The ROBOT is adaptable to many candy formulas because it is the first cooker that combines continuous, automatic cooking under atmospheric pressure with subsequent vacuum treatment, permitting the operator to make wide variations in the percentage of cornsyrup that is added.

Once the controls are set, the operation of the ROBOT is completely automatic. It has an output capacity of 800 to 2000 lbs. per hour.

*Complete technical service and factory original parts
available from our New Jersey plant.*

Hansella

HANSELLA MACHINERY CORPORATION

6 DEPOT SQUARE • ENGLEWOOD, NEW JERSEY • LOWELL 7-0666

NG

ou



pro-
w in
tity.
ulas
inu-
sure
the
tage

the
put

ON

666

SECTION

Ju

with

bro
prop

just
will
mar

rec

of t

con

off
Co
Fu
Da

Pro
Pu
El

Re

fo

June 1, 1956

Candy Business

.....

Charles W. Guilder has been named general sales manager of **Luden's, Inc.** He has been with Luden's since 1938, most recently covering northern California and Nevada.

Elias J. Corey, retired candy manufacturer, died recently. Mr. Corey, together with his brothers, founded and operated **Corey Candies** and the **Toledo Candy Company** until they sold the property in 1953.

H.B. Reese, founder of the famous peanut butter cup firm of Hershey, Pa., died recently, just on the eve of the company's announcement of the construction of a new factory. The new plant will be built on a seven-acre plot just west of Hershey, and will double the firm's capacity. For many years this company has manufactured just one product, peanut butter cups.

George S. Esposito, president of **Victoria Candy Company** of Hazeltown, Pa., died recently. His brothers, who have been in business with him, will continue the business.

Fred T. Haley, president of **Brown & Haley**, Tacoma, Wash., has been elected president of the Tacoma School Board.

Nestle is test marketing a new ten cent bar named Fruit 'n' Nut Milk Chocolate. It contains raisins, hazelnuts and milk chocolate, and weighs 1-3/4 ounces.

The New England Manufacturing Confectioners' Association has elected the following officers: President **Harry Gilson**, F.B. Washburn Corp.; Vice President **Lawrence L. Lovett**, Deran Confectionery Co.; Treasurer **W.A. Warren**, New England Confectionery Company; Secretary **Lane W. Fuller**, Daggett Chocolate Company. Directors are the above officers and **W.O. Wallburg**, **Robert C. Daugherty** and **Ernest M. Roberts**. **Walter R. Guild** continues as managing director of the association.

The New England Retail Confectioners' Association has elected the following officers: President **Alan Hilliard**, Hilliard's Kitch-In-Vue Candy Store; 1st Vice President **Galo Emerson**, Putnam Pantry Candies; 2nd Vice President **Raymond Hebert**, The Hebert Candies; Treasurer **Ellsworth Loud**, Loud's Candies; and Secretary **James Gray**, Merckens Chocolate Company.

Harold E. Bush has been named manager of candy industry sales for Magnus, Mabee & Reynard, Inc.

Published monthly by The Manufacturing Confectioner Publishing Company. Executive offices: 418 No. Austin Blvd., Oak Park, Illinois. Telephone Village 9-6310. Eastern Offices: 80 Wall Street, New York City 5, N.Y. Telephone Bowling Green 9-8976. Publication Offices: 1309 N. Main Street, Pontiac, Illinois. Copyright, 1956, Prudence W. Allured. All rights reserved. Entered as second class matter at Indianapolis, Ind., application for re-entry at Pontiac, Illinois, pending. Application for change of frequency and change of name pending.

doodlings

by tom sullivan

DESPITE ALL THE progress of science, says A.O. Batista, the best way to get ahead is to use the one you've got.

* * *

IN A RECENT American Mercury article, "Just Push a Button," Waldo Carlton Wright makes it easy for us to understand one aspect of what is involved in automation when he writes!

"There is the little item of one trillion, four hundred million dollars! That is what it will take to change over all plants to automation. This is four times the total wealth invested in all American factories, plants and office buildings."

Well, you won't deny that complete automation comes in a nice round figure!

* * * *

DRAMATIC EVIDENCE that display is the key to selling candy is contained in the results of tests conducted by the Wholesale Confectionery Institute Foundation.

No argument.

But what do you have to do to get your goods displayed? And knowing what's necessary, will you do it?

* * * *

THIS IS A quote of a quote from Arthur D. Little's Industrial Bulletin:

Research is like saving — if postponed until needed, it is too late to start.

* * * *

ENJOY SOME EVERY DAY. — Candy's famous slogan has finally crashed the dog market. Long Island Lighting Co. has decided to win over the friendship of dogs who have been nipping their meter readers with remarkable regularity.

Henceforth, each meter reader will make his rounds with a generous supply of dog candy. When Rover lights out for the meter man he will find his path strewn with goodies. This will deter him from sampling the meter reader's leg, the lighting company hopes.

Incidentally, this story emanated from Mineola, L. I. Wonder if Mason's Charlie Haug might have thought up the idea behind it.

* * * *



WHEN BILLY ROSE, the diminutive impresario, was asked why he became a theatrical producer, he explained:

"I guess I wanted to wear a black hat and meet the girls."

Making a cool million or two, we suppose, was merely an afterthought.

* * * *

ANON, MOST WIDELY read of all authors, tells us! "The home of the brave is any home built at present prices, under prevailing 'codes.'"

* * * *

WHICH REMINDS US of what one of the press services came up with:

No brain is stronger than its weakest think.

* * * *

WHEN JOE ZILCH, candy manufacturer, was queried as to why he concentrated all of his marketing efforts on the Supers, he replied simply:

"Turnover!"

When asked what his banker thought of his operation, he replied somewhat vehemently:

"Just keep my banker out of this!"

* * * *

ARRIVING HOME FROM the recent Candy Production Conference, the fond wife of one of the speakers asked him:

"How was the applause after your speech?"

"Terrible," he moaned. "It sounded like a caterpillar in sneakers romping across a Persian rug."

* * * *

INDIANA TEACHER advises that "A worker in the U.S. today can turn out about six times as much as his great-grandfather 100 years ago. If this ascending curve continues, his great-grandson will be able to produce in one seven-hour day all that a man produces in the present forty-hour week."

How much or little that may amount to depends, in quite a few cases, on what a man actually produces in the present so-called work week.

* * * *

A FEMALE YODELER is responsible for this:

"It is wonderful that in spite of all the accomplishments of our modern era, in spite of all cold science and industry, there are still innumerable hand-written love letters."

o, was
lained:
eet the
merely

! "The
prices,

services

d as to
on the

eration,

on Con-
ed him:

erpillar

he U.S.
s great-
ve con-
e in one
present

ends, in
s in the

omplish-
nce and
en love

TIONER



*Good-looks help, but it's
the flavor that sells...*

Almond Mellows

Here's your formula:

4 lbs. sugar
4 lbs. corn syrup
1½ lb. hard butter
1 gal. manufacturing cream
1 oz. salt
Vanilla Flavor to suit
10 lbs. (approx.) commercial
dipping marshmallows
Blanched Nonpareil 20/22
Almonds

Cook sugar, corn syrup, butter and cream to caramel test. Add salt at boil and flavor when test is reached. Using a fork, dip the marshmallows in the caramel and place blanched almond on top. For variety, use 1½ pounds of liquor chocolate to produce a chocolate caramel piece, or omit the blanched almond and roll the caramel-covered marshmallow in Blue Diamond diced roasted almonds.

Of course it's true that eye-appeal sells candy, but it takes more than good-looks to bring the customer back for more. That's where almonds come in. That big, plump blanched almond on these Almond Mellows invites the first sale, and the crunchy goodness of this almond confection does the rest. There's no doubt about it, almonds sell candy.

No doubt, either, about the preference leading candy-makers have for Blue Diamond Almonds. From this dependable source, candy firms draw on year-around cold-storage stocks of selected almonds. Whether they want size-graded whole kernels or processed specialty items, candy makers know that Blue Diamonds will be free from dust and foreign particles, accurately graded, with controlled minimum moisture content. Write for samples and prices . . . on your letterhead, please.

Blue Diamond ALMONDS

CALIFORNIA ALMOND
GROWERS EXCHANGE
Sacramento, Calif.



Sales Offices: 100 Hudson St., New York 13, and 549 W. Randolph St., Chicago 6



ONLY GOOD FLAVORS can be relied upon to produce tastier, more palate-tempting confections. And the most competent production men in the industry are agreed that no matter what may be a manufacturer's advantages in candy making experience and facilities, his finished goods can be no better than the materials used in their manufacture. Remember: *Your product is ONLY as good as its FLAVOR!*

Write us fully for helpful information concerning any candy flavoring problem you might have. Address Flavor Division, Dept MC

FRITZSCHE

Established



1871

Brothers, Inc.

PORT AUTHORITY BUILDING, 76 NINTH AVENUE, NEW YORK 11, N. Y.

BRANCH OFFICES and STOCKS: Atlanta, Georgia, Boston, Massachusetts, Chicago, Illinois, Cincinnati, Ohio, Los Angeles, California, Philadelphia, Pennsylvania, San Francisco, California, St. Louis, Missouri, Montreal and Toronto, Canada and Mexico, D. F. FACTORY: Clifton, N. J.

The Manufacturing Confectioner

with INTERNATIONAL CONFECTIONER

Vol. XXXVI

No. 6

JUNE 1956

Edited and Published in Chicago
The Candy Manufacturing Center of the World



Conference Report

Tempering Procedures—Thermal Analytical Studies

.....W. Marvin Cochran and Melvin Ott 41

Proceedings of the 10th PMCA Production Conference

.....Editorial Staff 33

Systematic Cost Reduction

.....Edward A. Terry 55

Depositing Candy in Moulds

.....John W. Vassos 88

Neutralizing Paperboard Odors

The development of a deodorizing agent that masks the typical paperboard odor, without imparting one of its own, promises to solve the perennial problem of odor transfer to chocolate candy. Arthur Goldman 49

The Hannover Fair

Our exclusive annual report of new developments at the world's largest candy machinery exhibit.....J. Koch 77

Reading: a businessman's tool

.....N. B. Smith 95

NCA Convention Program

.....67

NCA Exposition Guide

.....68

ARC Convention Program

.....38

Sugar Report	40	Candy Clinic	81
New Packages	59	Classified Ads	102
New Products	62	Brokers	104
Calendar	66	Advertiser's Index	105

COVER: This unique new 24-count window carton does quadruple duty for Blumenthal. The excellent design and window allow it to be used for any one of four different items.

Founder—Earl R. Allured
Editor—Stanley E. Allured
Technical Editor—Wesley Childs
Eastern Manager—James W. Allured
Circulation Director—M. Seelman
Publisher—P. W. Allured
Consulting Editor—Thomas F. Sullivan
English Representative—M. G. Reade
Sales Manager—Allen R. Allured

Publication Office
418 N. Austin Blvd.
Oak Park, Illinois
Village 8-6310-11

Eastern Office
80 Wall Street
New York 5, N. Y.
Bowling Green 9-8976

London, England
Prospect House
Heath Street N.W.3

Increase Sales With Bon Bons!

This is the day of color. It has now become fashionable in boxed chocolates. Many candy manufacturers are placing four or five yellow, pink, white, green or peach colored pieces in their packages. Some are even making a special box of all colored pieces.

For holidays

Use appropriate colors for special days, and make the extra sales which are waiting for those who realize that colors will sell candy. Try all your pieces in different colors.

COLOR SELLS

Bon Bons do not take the place of chocolates; they complement each other. For a well rounded assortment in packages as well as in "specials" you should use Bon Bons. Try them and see the results. Use your imagination for designs within your present packages.

For cool summer sellers or year 'round specialties Bon Bon Coating will draw attention to your old reliables. Promote your colored pieces as "something new" or "extra." Also, Bon Bon Coating will not affect those who are allergic to chocolate.

write or call collect

NU-COAT

"Bon Bon Coating Specialists"

NU COAT BON BON COATING CO.
4338 N. WESTERN AVE.—CHICAGO
PHONE IRVING 8-5007

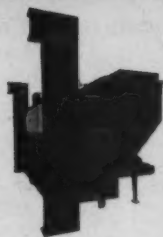
Outstrip competition with PLANT LAYOUT SERVICE and Chocolate Processing Equipment by Lehmann



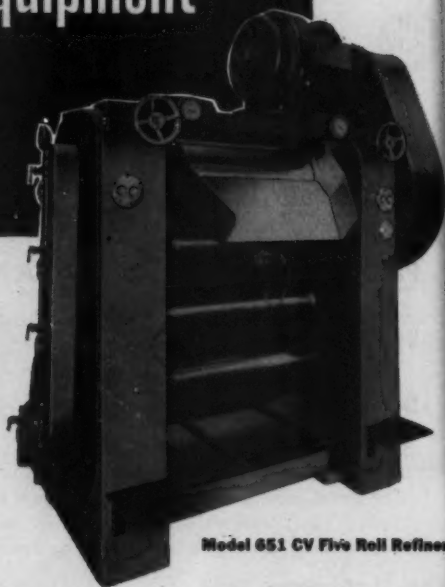
Model 10M
Chocolate Paste Mixer



2000 lb. Mixing and
Tempering Kettle,
Vertical Type



Model 88 DSL
Cracker & Fanner



Model 651 CV Five Roll Refiner



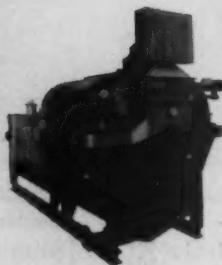
Model 450 Twin Paste Mixer



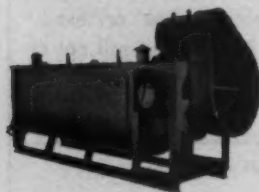
Model 913 ACL
Three Roll Liqueur Mill



Nelson Automatic
Chocolate Tempering Machine



Model 450
Disc Conche



Model 40MU
4000 lb. Emulsifier



Model 48 D-LX Triple Mill

If you contemplate new plant construction, or renovation of existing facilities, contact Lehmann before your plans are crystallized. It may save you important money and insure an improved competitive position for your products.

Lehmann designs plant layouts for efficient, low-cost handling and process control. In addition to the standard machines shown, Lehmann will design and fabricate for individual plant requirements. We use standard commercial units wherever possible, whether manufactured by us or not, for low-cost, trouble-free operation.

Preference of Lehmann engineering and equipment by leaders in the industry, stems from sound appreciation of the fact that processing machinery providing characteristic Lehmann features can be produced only by a company with seasoned experience—more than a century in this case.



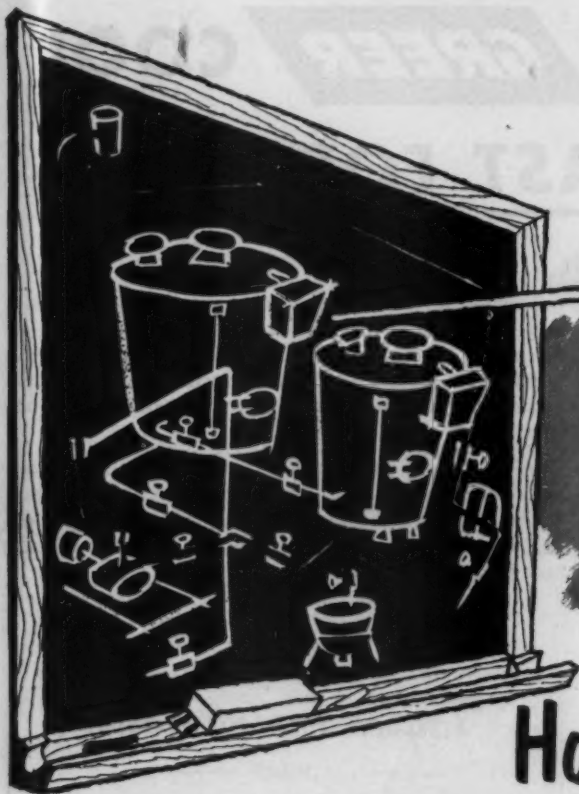
J. M. LEHMANN COMPANY, Inc.

COAST-TO-COAST SERVICE

Moore Dry Dock Company Oakland, California

Lammert & Mann Co. Chicago 12, Illinois

J. M. Lehmann Co., Inc. Lyndhurst, New Jersey



How you can get the most out of a liquid sugar system

“These three hints,” maintains your Flo-Sweet Engineer, “will help you get the most out of your liquid sugar system.”

“First, make sure the system is designed by engineers who are experienced both in liquid sugar and in the technology of your food products.”

“Second, have these engineers install the system.”

“And third, use only top quality liquid sugar, blended accurately to your individual specifications.”

“Here at Flo-Sweet we’re in the habit of helping food manufacturers with all three of these important steps. In fact, that’s our one and only business. If you aren’t already enjoying the convenience . . . the sanitation . . . the cost-cutting and quality-improving advantages of a Flo-Sweet system — why not check with us today?”

“MUST” READING FOR EVERY SUGAR USER: This authoritative new manual contains over 200 pages of detailed information on the design, installation and operation of liquid sugar systems. It covers the use of liquid sugar in major food industries, provides a wealth of technical data on liquid sugar itself, and gives specific information on performance and costs. A valuable reference work for every food technologist’s library. Price \$5.00.

THIS IS
LIQUID
SUGAR

REFINED SYRUPS & SUGARS, Inc.

YONKERS, NEW YORK

FLO-SWEET
FIRST IN LIQUID SUGAR

SERVING INDUSTRIAL SUGAR USERS EXCLUSIVELY
FROM YONKERS—PITTSBURGH—TOLEDO—DETROIT

TAYLOR HELPS *GREER* COOL CHOCOLATE FAST FOR YOU!

The Problem: Modern candy-coating methods demand a fast continuous flow of chocolate that is free of unstable crystals and of a consistent temperature.

The Solution: The Greer Chocolate Cooling Tube, developed by the J. W. Greer Co. of Wilmington, Mass., cuts the cooling time of chocolate coatings *from hours to minutes*. Working on the principle of continuous rather than mass or kettle cooling, the Tube's thin-film process gives complete and uniform cooling to all particles of the chocolate. The Tube cools efficiently with low water consumption and assures better viscosity control, resulting in more even product coverage.

Why It Works Well: Positive and accurate temperature control is vital to assure a uniform product and to prevent "shocking" the chocolate during cooling. Greer builds this control into its units with Taylor FULSCOPE® Temperature Controllers.

The Taylor FULSCOPE Controller, with its sensing bulb in the chocolate outlet line, meters the amount of cool-

ing water admitted to the water circulation system—and compensates for various types of load changes. It maintains a close temperature differential between the finished chocolate and the recirculating water and assures even temperature chocolate that is highly receptive to seed.

This is only one of the ways Taylor Controls can help you make better candy at less cost. For other suggestions, see your Taylor representative or write for **Catalog 900**. Taylor Instrument Companies, Rochester, N.Y., and Toronto, Canada.

®Reg. U.S. Pat. Off.

Taylor Instruments

— MEAN —

ACCURACY FIRST

IN HOME AND INDUSTRY



Here are two Greer Cooling Tube Machines in use for cooling chocolate coatings prior to enrobing. Tanks at left hold the hot chocolate supply. The coating machines in this plant are on the floor above.

Get the tested, true,
the tried, the new,
the different
from



Take *Dreyer* Spray-dried Flavors

All the fine, full flavors your fine foods need are spray-dried for you now by Dreyer.

Dreyer makes them by today's most modern methods, using Dreyer's expert skills to safeguard them. They are very high quality flavors, in a wide, varied range. You can most profitably use them to improve the taste of popular products, and for desired, quick flavor changes.

On your business letterhead request free samples that show you their long-lasting excellence. It is time you tried Dreyer spray-dried Flavors.

Dreyer Spray-Dried Flavors include:

Apple, Banana, Cherry, Wild Cherry, Grape, Peach,
Pineapple, Raspberry, Root Beer, Strawberry, Oil
Lemon, Oil Lemon-Lime, Oil Lime, Oil Orange



Get the essential quality you require from

P. R. Dreyer Inc.
Serving You Since 1920

601 West 26th Street, New York 1, N. Y. • 520 N. Michigan Avenue, Chicago 11, Ill.

Complete stocks carried in Chicago



*You are Cordially Invited
to Visit our Hospitality Suite
during the*
ARC-NCA CONVENTIONS-Boston, Mass.

June 10-14, 1956

Statler Hotel - Somerset Hotel

**Mechanics Hall
#42**

PETER'S • RUNKEL'S



THE NESTLÉ COMPANY, INC.
2 WILLIAM STREET • WHITE PLAINS, N. Y.

®Trade Mark Reg.

ever

in

PET

TH

ER 2 W

**tops
everything
in summer
candies**

NESTLÉ'S ICECAP COUVERTURES

NEW and distinctive in fine, rich, inviting pastel color tones.

DELICIOUS in its pleasing, delightful taste; complements your centers.

DIFFERENT and mellow in flavor, smooth and fine in texture and quality.

... and a **MELT-AWAY!** So luscious, it practically "eats like ice cream".

**NESTLÉ'S
ICECAP**

A new approach to quality, flavorful summer coatings with a good shelf life. Nestlé's Icecap Couvertures are especially recommended for fresh fruit creams, and for:

Vanilla
Coconut
Maple
Maple Nut
Nut Crunch
Nougat
Caramel
Jellies
Pectin Jelly Centers
Peanut Butter Chips
Black Walnut Chips

PETER'S • RUNKEL'S

NESTLÉ'S

THE NESTLÉ COMPANY, INC.

2 WILLIAM STREET • WHITE PLAINS, N. Y.

® Trade Mark, Reg.

IT TAKES A
million dollar laboratory
TO GIVE YOU *Quality Controlled Flavors*



We will send
samples of the
remarkable new

ALVA
RASPBERRY
STRAWBERRY
and **LIME**

for cream centers
or hard candies.

ALVA flavors are tops in taste — AND — they are dependably identical time after time. after time. The ALVA flavors quality control laboratories insure consistent quality in every drop of flavor manufactured. Precise control is maintained, for raw materials, through each step of processing to a final double check before shipment. In the ALVA test kitchens every flavor is tested in the product for strength, quality, and shelf-life.

You get what you want *every* time with ALVA confectionery flavors.

VAN AMERINGEN-HAEBLER, INC.

521 WEST 57th STREET, NEW YORK 19, N. Y.

Alva
FLAVORS

NU-KREME

GRADE "A" OF ALL NOUGAT CREAMS

KREME-TEX

FOR RICHER TASTING CARAMELS
AND LONGER LASTING FUDGE

HONEYCOMB CHIPS

BEST FOR DIPPING

Flavor



Unsurpassed

Presenting The New "SUPER-ROYAL"



CHARACTERISTICS:

- Minimum speed 34 revolutions per minute
- Maximum speed 50 revolutions per minute
- Minimum speed developing 100 feet per minute (32 mt.)
- Maximum speed developing 150 feet per minute (46 mt.)
- Die diameter 12" (300 mm.)
- Die circumference 38" (942 mm.)
- Net weight of dies 170 lbs.
- First conveyor increased
- Cooling length 382" (9.70 mt.)

CARLE & MONTANARI, INC. • 95 TEMPLE AVE., HACKENSACK, N.J.

Whitten HYPOWR

We make HYPOWR and other fine gelatins with quick set and light color to help you make quality pieces at a saving. Our products are pure and very uniform.

Our gelatins are used in all the regular items as well as in new types like extruded marshmallows and "one-shot" creams and fudges.

We always have new ideas.

If we can help, let us hear from you.

J. O. WHITTEN CO.

"A name in gelatin since 1903"

WINCHESTER, MASSACHUSETTS

New York City
192 Washington Street

Chicago
Davis and Davis



Here's the new
VOSS SATYN-GLOSS
ENROBER BELT
 that lasts....and
LASTS....and
LASTS!

Two and a half years of testing proved this the *most advanced Enrober Belt we'd ever seen*—and we've been Belt specialists for the candy industry for many, many years!

Long life? Yes, sir! In fact, the actual production tests show that **SATYN-GLOSS** will stand up two or three times as long as any other Enrober Belt now in use—without cracking or checking.

And here's the bonus! Your candy comes off the Belt with beautiful satiny-gloss bottoms—the real *quality* look you need for sales!

We stand behind this Belt unconditionally. Send for further details now!

also... HI-GLOSS and HI-LUSTRE Enrobing Cooling Tunnel BELTS—for glossier bottoms ★ **END-LESS BOTTOMER and FEED BELTS**—White Neoprene Treated, or Plain ★ **PACKING TABLE BELTING**—Plain, or Treated with smooth white flexible coating ★ **CARAMEL CUTTER BOARDS** ★ **BATCH ROLLER BELTING** ★ **WIRE BELTING** for enrobbers and special conveyors ★ **CORRUGATED RUBBER PULLEY COVERS** ★ **CANVAS SPECIALTIES**



5647 N. RAVENSWOOD AVE., CHICAGO 26, ILL.

118 E. 28TH ST., NEW YORK 16, N. Y.

18 RICHARDS CIRCLE, WEST NEWTON 65, MASS.

P. O. BOX 2128, HOLLYWOOD 28, CALIF.

BOOTH 9
N.C.A. SHOW

Penetrometer Tests prove Cast creams containing SORBITOL are **2 times SOFTER** *Even after 6 months*



In fact penetrometer tests prove that cast creams containing sorbitol are softer than ordinary cast creams from the start. What's more, taste panels rated the sorbitol cast creams higher at every storage test period. Sorbitol modifies the crystal structure of mixed sugar systems to keep creams soft and flavorsome.

PRODUCTION DIVIDEND

A unique characteristic of sorbitol-made creams is that they can be left in starch molds over the weekend without loss of quality.

Sorbitol imparts a whiter appearance to creams. This whitening effect occurs even at higher cooking temperatures . . . demonstrating the color stability of sorbitol in heating. Sorbitol is mildly sweet and blends well with other ingredients. For better tasting, better selling cast creams—try sorbitol.

Write or call Atlas today for samples, technical data, formulation help. And ask your Atlas salesman to show you the new Atlas color film, "Practical Small Scale Making and Testing of Candy."

TRY THIS SORBITOL FORMULA FOR CAST CREAMS

A	Granulated sugar	20 lbs.
	Corn syrup	5 lbs.
	Water	3¼ qts.
B	Fondant*	50 lbs.
	Egg frappé	5 lbs.
	Invertase	¼ oz.
	Mint flavor	¼ oz.

Cook (A) to 238° F. and add (B) with continuous mixing. The batch is cast at 155-160° F. in starch and enrobed the next day.

*Fondant for cast creams

Sugar	50 lbs. 14 oz.
Corn syrup	12 lbs. 11 oz.
SORBO® (70% sorbitol solution)	6 lbs. 6 oz.
Water	8¼ qts.

Cook to 244° F. Pour onto fondant mill, allow to cool to 100° F., and cream. Where a cream of firmer consistency is desired, the cook may be raised to 248° F.

Get a Bigger Bite of Candy Sales with Best Foods Oils

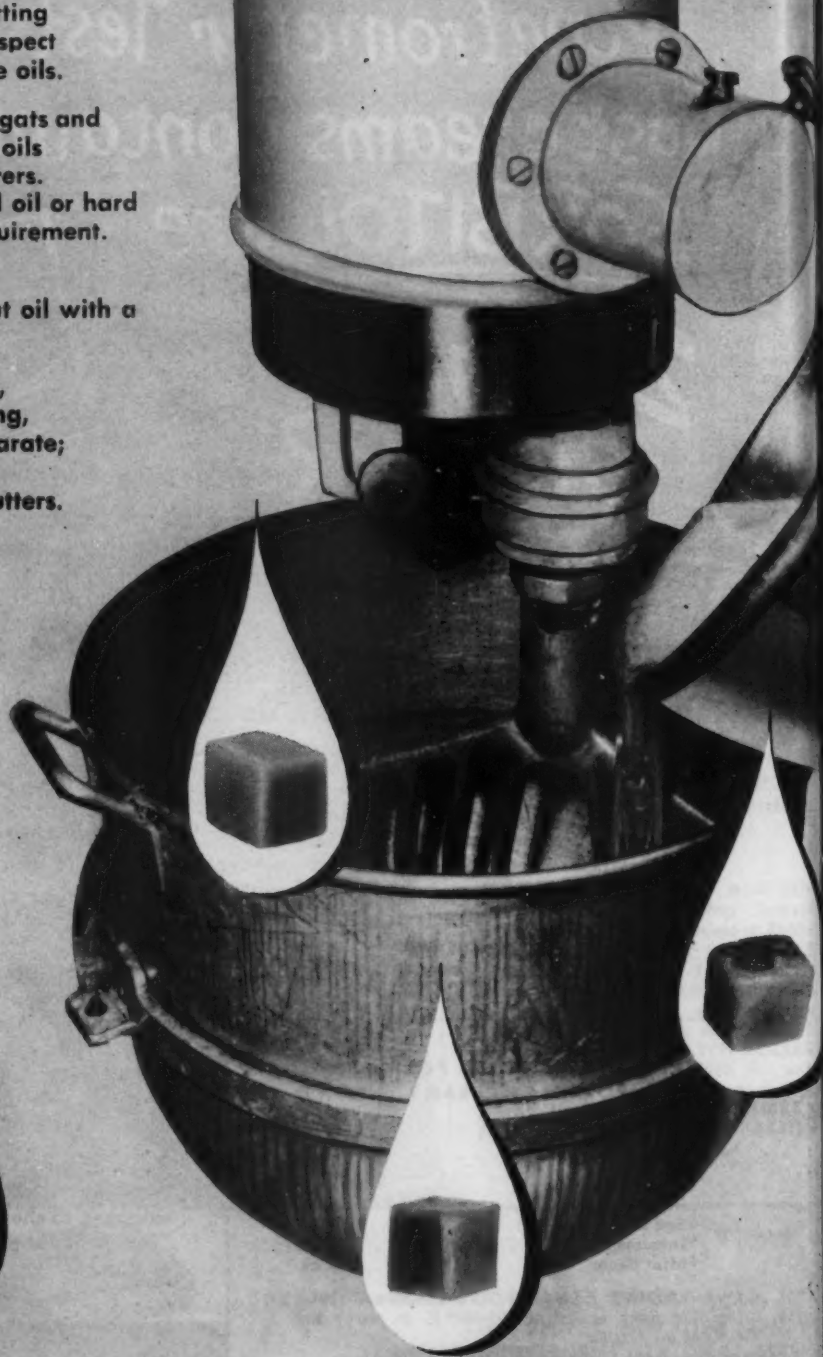
The all important chewing and cutting qualities are enhanced in every respect when you use Best Foods vegetable oils.

In caramels and kisses, taffy, nougats and other such confections, Best Foods oils are favored by leading manufacturers. There is a Best Foods hydrogenated oil or hard butter to meet every lubricating requirement. Two of the most popular are:

FILBISK — a hydrogenated coconut oil with a 110-degree melting point.

S-70-XX Hard Butter — exclusive, patented, pure white, neutral tasting, homogeneous oils that cannot separate; uniform in quality, has a sharper melting point than ordinary hard butters.

Whether **FILBISK** or one of the **S-70-XX** butters (available with varying melting points) will suit your needs better, The Best Foods laboratories will gladly help you use them to your best advantage. Contact your Best Foods representative for fast, dependable service.



YOU DO BETTER WITH BEST FOODS

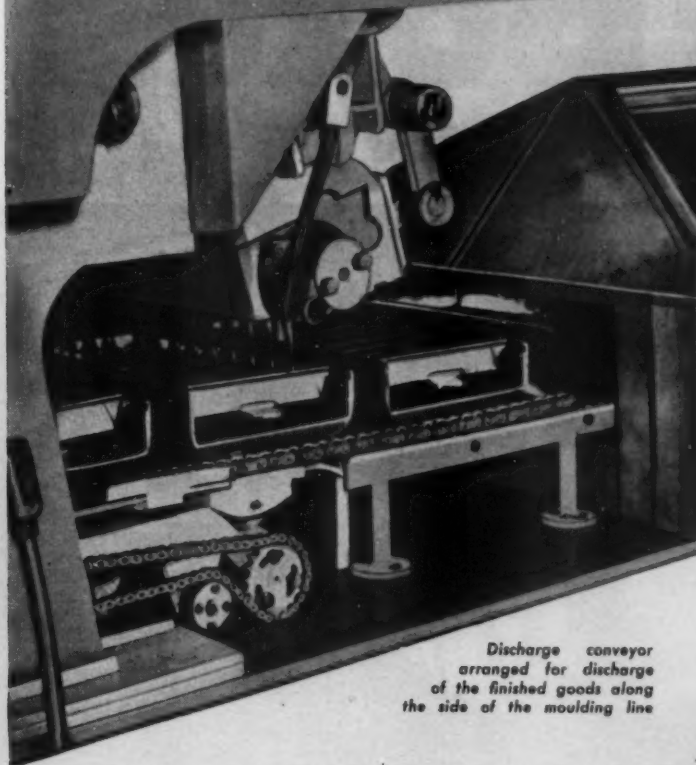
NEW YORK • CHICAGO • SAN FRANCISCO

THE
BEST FOODS
INC.

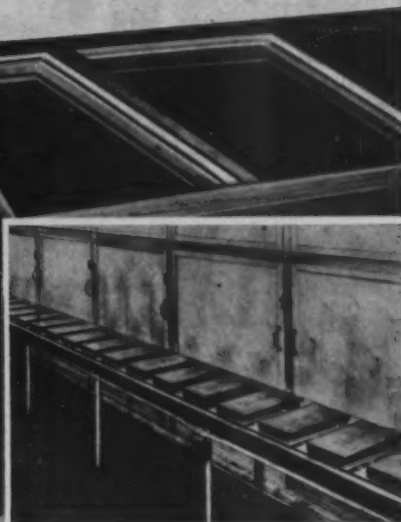
DALLAS

Repr
for J

JENSEN



Discharge conveyor
arranged for discharge
of the finished goods along
the side of the moulding line



Production of 11 lb. slabs



Production of bars

fully automatic moulding installation

Combination machine for cou-
verture slabs and ordinary bars

A modern high-production ma-
chine of continuous operation

JENSEN means
Maximum production of
perfect goods at precision
weight on minimum floor space
Fully automatic working
Economy Hygiene
Unsurpassed versatility

MIKROVÆRK A/S



32-38, SYDMARKEN, SØBORG
(COPENHAGEN) DENMARK
TELEGRAMS:
MIKROFACT - SØBORG

Representative for U.S. & Canada: VACUUM CANDY MACHINERY CO., 15 Park Row, New York 38, N.Y.

for June, 1956

Page 23

now...handy smaller size...new features

Tote Boxes

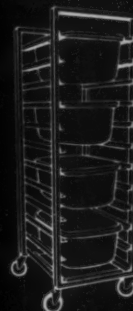
by WEAR·EVER



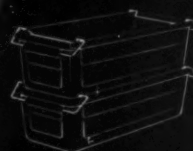
Smooth, rounded,
easy-to-clean
corners

#24 Over-all Size:
23 $\frac{3}{4}$ " x 17-1/16" x 10 $\frac{3}{8}$ "

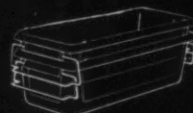
Exclusive
Open Bead
design



#24 avail-
able without handles
to fit Crea-Cor Pan Rack

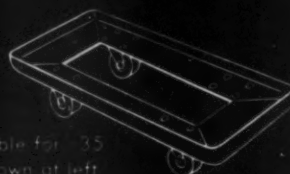


Stack
when filled



Nest
when empty

Strong, smooth
one-piece handle



Dolly available for #35
shown at left

#35 Over all Size:
14 3/16" x 16 7/8" x 12"

You asked for it... a smaller version of the famous Wear-Ever #35 Tote Box. It's our new #24, shown at top in the above illustration, and it's available now.

We've designed it particularly for you whose needs call for a lighter, smaller, easier-to-handle container. It is available without handles, to fit perfectly in a Crea-Cor pan rack.

This new box incorporates the same quality construction features as our standard size box—special extra hard wrought

Wear-Ever Aluminum Alloy, sanitary open bead and extra strong, double-embossed bottom.

Like its big brother, shown in the smaller photo, this new box stacks when full, nests when empty and is available with your identifying imprint on side or end, if desired.

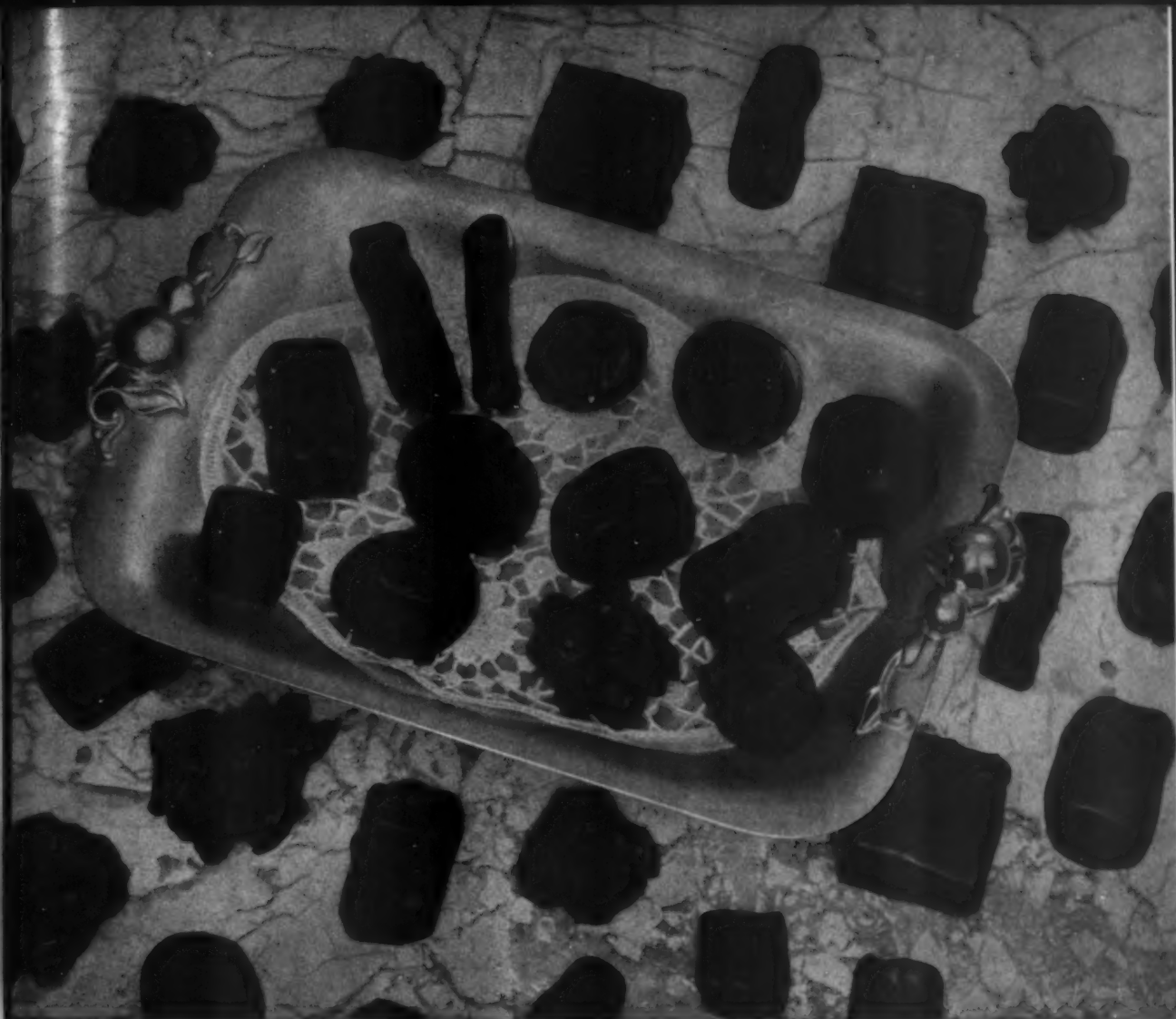
For full information on our complete line of food handling items, call your local Wear-Ever man, or send coupon below.

WEAR·EVER ALUMINUM UTENSILS

THE ALUMINUM COOKING UTENSIL COMPANY, INC.
WEAR-EVER BLDG., NEW KENSINGTON, PA.

.....

• The Aluminum Cooking Utensil Company, Inc.
• 9906 Wear-Ever Building, New Kensington, Pa.
• GENTLEMEN: I'd like to know more about your Tote Boxes and
• other handling equipment.
• ☐ Send me your catalog. ☐ Have your representative see me.
• NAME.....
• TITLE.....
• Fill in, clip to your letterhead, and mail today.
•



for your fine candies

quality *Chocolate Coatings*

Ambrosia Chocolate Coatings are recognized for a smoothness that complements the creamiest centers; flavor that is full-bodied and rich; and a workability that assures the most demanding candy craftsman perfection of "stringing" and glossy finish.

Ambrosia
FOOD OF THE GODS

For samples and more information write to
AMBROSIA CHOCOLATE COMPANY
Milwaukee 3, Wisconsin

MANUFACTURERS OF FINE CHOCOLATE AND COCOAS SINCE 1894

NOTED CANDY MAKER SAYS:

"We Save \$14,000 A Year Per Machine by Using New Baywood Depositing Boards in Conjunction with Our Chocolate Depositing Machines." (Name on request)

NEW BAYWOOD DEPOSITING BOARDS

will save you over 50% labor and time cost . . . eliminate 90% of your "waste factor" in operating chocolate depositors. They are adaptable to a number of depositing machines. Boards work with new type paper sheets that are reuseable with 20 or more batches.

BAYWOOD "STANDARD" STARCH TRAYS

- . . . best quality for the money
- . . . immediate delivery from stock

Regular line—\$1.00 each

Bottom— $\frac{1}{4}$ " Tempered Presswood
Sides, Ends and Legs—clear kiln dried Basswood
Drive screws used throughout
Size— $14\frac{1}{2}$ " x 32" (OD), $1\frac{1}{2}$ " deep—maximum

Custom line—\$1.10 each

Bottom— $\frac{3}{16}$ " Tempered Presswood
Other qualities as in Regular line

De luxe line—\$1.45 each

Bottom— $\frac{1}{2}$ " Basswood
Hardwood Sides, Lock Cornered

ALL STARCH TRAYS F.O.B. BROOKLYN

BAYWOOD "LONG LIFE" STARCH TRAYS

Outlast cheaper trays by four to one—
stand up under rough handling—\$1.65
per standard size tray.

"Long Life" starch trays are a good investment for candy makers who appreciate the money-saving advantages of durable, top quality trays . . . write for samples.

BAYWOOD MFG. CO., INC.

2753 Stillwell Avenue, Brooklyn 24, N. Y., COney Island 6-1133

All Affiliated Wood Products
For Confectioners

- All Wood Starch Trays
- Pan Room Trays
- Dipping Boards
- Starch Tray Dollies (wood or steel)
- Wire Bottom Trays

SALES SERVICE AND TECHNICAL ASSISTANCE
AVAILABLE WITHOUT OBLIGATION

Attach this coupon to your letterhead—

Baywood Mfg. Co., Inc.
2753 Stillwell Ave.
Brooklyn 24, N. Y.

Date _____

Gentlemen: Please send me a sample of your starch tray:
(Please indicate type of tray used)

Ship to: Name _____ Title _____

Company _____

Street _____ City _____ State _____

Boston



VISIT BOSTON—the 1956 Hub of Confectionery activity
for the

30th

ANNUAL CONFECTIONERY INDUSTRIES EXPOSITION
to be held at Mechanics Hall, June 10th through 14th.

See historic Boston landmarks.

VISIT, also, the modern new plant at nearby
Wilmington, home of the **J. W. GREER
COMPANY**, now in its 37th year of service
to the confectionery industry.

PLAN to stop at Greer Booths 66 to 70
to **SEE** or **DISCUSS** with our engineers latest
developments in Chocolate: Coating, Cooling,
Handling, Moulding and Packing

ASK ABOUT

1. A new concept in automation for Packaging and Wrapping
2. A Greer development which provides an opportunity for new products.

You will also be able to pick up your printed copy of "Effective Chocolate Cooling and the Laws of Heat Transfer", the new, thought-provoking semi-technical paper developed through Greer research by Dr. Daniel P. Norman. This is important. Do not miss it.

We'll see you in Boston — home of Greer-made products.

J. W. GREER COMPANY

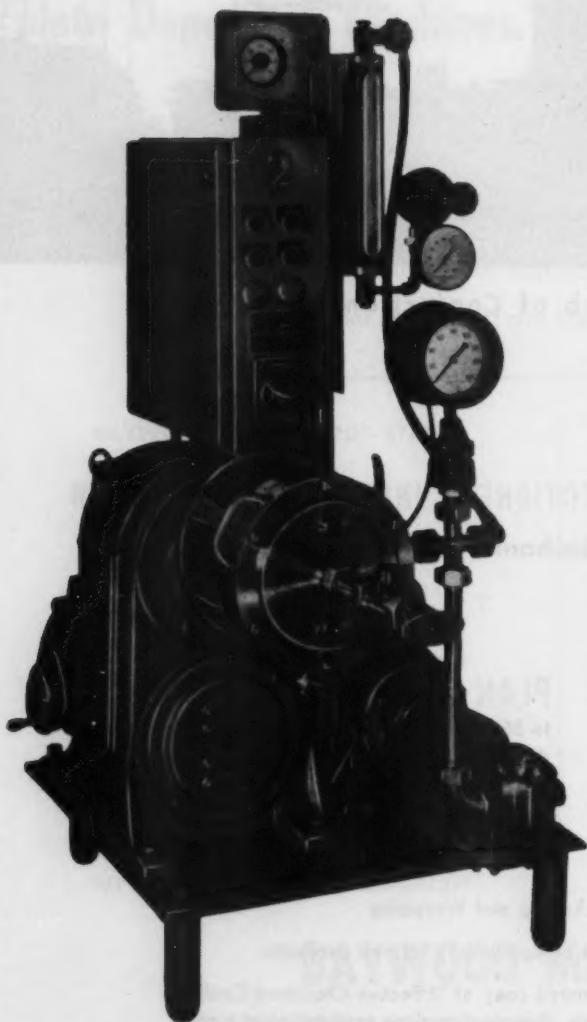
WILMINGTON, MASSACHUSETTS

Sales Engineering Offices: Chicago, Ill., and San Francisco, Calif.

European Representatives: Bramigk & Co., Ltd., 15 Creechurch Lane, London E. C. 3,
England



OUR NEW BABY!



THE NEW MODEL 8M OAKES MIXER

Here is our new baby! The new OAKES CONTINUOUS AUTOMATIC MIXER of small size, expressly designed to fit the requirements of plants with relatively low rates of production. Fully equipped with the same basic features as the well known larger models, this new MODEL 8M OAKES MIXER now permits the small plant to obtain the same advantages of quality production as the larger plant, with proportionate savings. All of the products for which the larger Oakes Mixers have long been used may be processed with this new model with equal ease and facility.

This baby Oakes Mixer has an hourly capacity of 125 pounds to 750 pounds of White Cast Candy Marshmallow and up to 500 pounds of Grain Marshmallow. Weight of Marshmallow may be accurately adjusted as required for other types. Many other products too numerous to mention may also be processed with this new unit.

The MODEL 8M OAKES MIXER is admirably adapted to research, experimental and pilot plant requirements and will fill a long felt need for a continuous, automatic mixer in these fields. Equipment modifications can be made to accommodate the processing requirements of different products. The use of a production machine for experimental work has the distinct advantage of assuring reproducible results in practice, in fact, the MODEL 8M OAKES MIXER may be placed on production at the conclusion of experimental investigations.

NOW—OAKES MIXERS IN THREE SIZES

We now offer three distinct sizes of Oakes Mixers, MODEL 8M for the small plant, MODEL 10M for the medium plant and MODEL 14M for the large plant, all equally capable of improving quality, providing uniform production and permitting substantial savings. Here is your opportunity to modernize your production facilities with equipment which can mean the difference between profit and loss.

*See this new Oakes Mixer in our Booth No. 97 at the Confectionery Industries Exposition,
Boston, June 10-14.*

THE E. T. OAKES CORPORATION

26 COMMACK ROAD, ISLIP, LONG ISLAND, NEW YORK



lasts n' lasts
WHEN IT'S MADE WITH *Clinton®*

Whether your candy product requires that "all-day" consistency, or a "melt-in-a-minute" quality, you can rely on fine ingredients by Clinton.

There's a *lasting goodness* too, to *all* candies made with Clinton corn syrup. That's because it prevents crystallization, extends shelf life, controls texture.

Start turning more new friends into old customers with Clinton products from corn . . . syrup, starches and Clintose brand dextrose.



Quality products

... and remember

... technical service in connection with your specific problems is available without obligation.

FROM THE WORLD'S CORN CENTER



CLINTON CORN PROCESSING COMPANY
A Division of Standard Brands Incorporated
 CLINTON, IOWA

BUHLER

high capacity 5 ROLL MILL

fully hydraulic

ROLL PRESSURE REGULATION

- **WORLD FAMOUS
BUHLER ROLLS
16" x 40"**

Water cooled with
thermometer check.

- **CONSTANT ROLL
PRESSURES**

No variations due to
temperature rise or
decline.

- **REDESIGNED SCRAPER**

With hydraulic control.

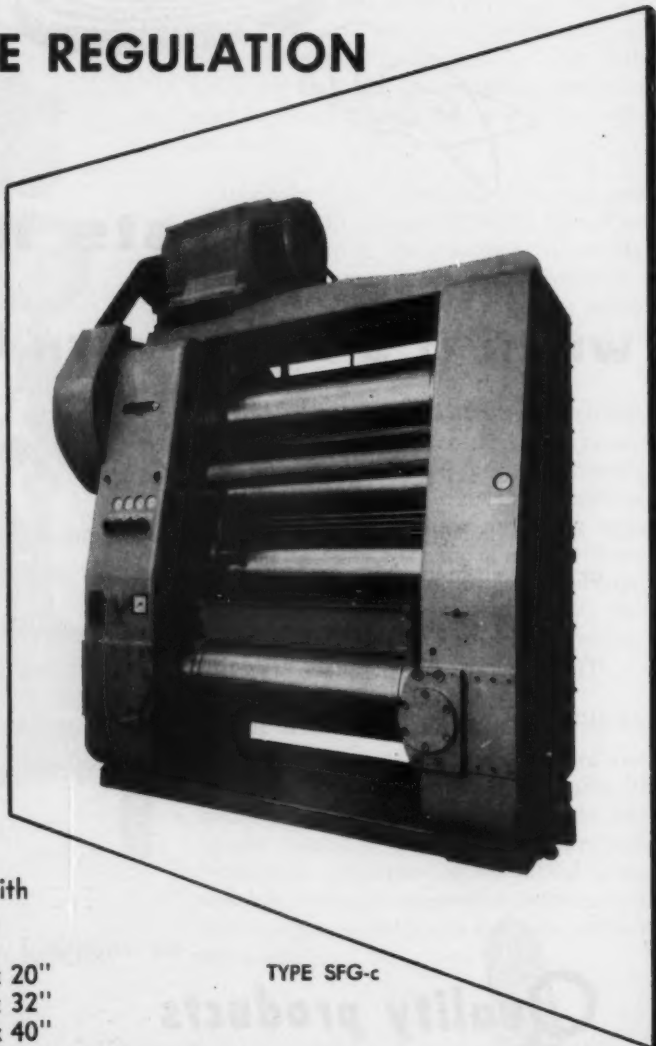
- **ROLLS ALWAYS
PARALLEL**

Also —

Up to 60% higher output with
fully hydraulic 3-Roll Mills

SDA - Roll Dimensions: 10" x 20"

SDT - Roll Dimensions: 16" x 32"
16" x 40"



TYPE SFG-c

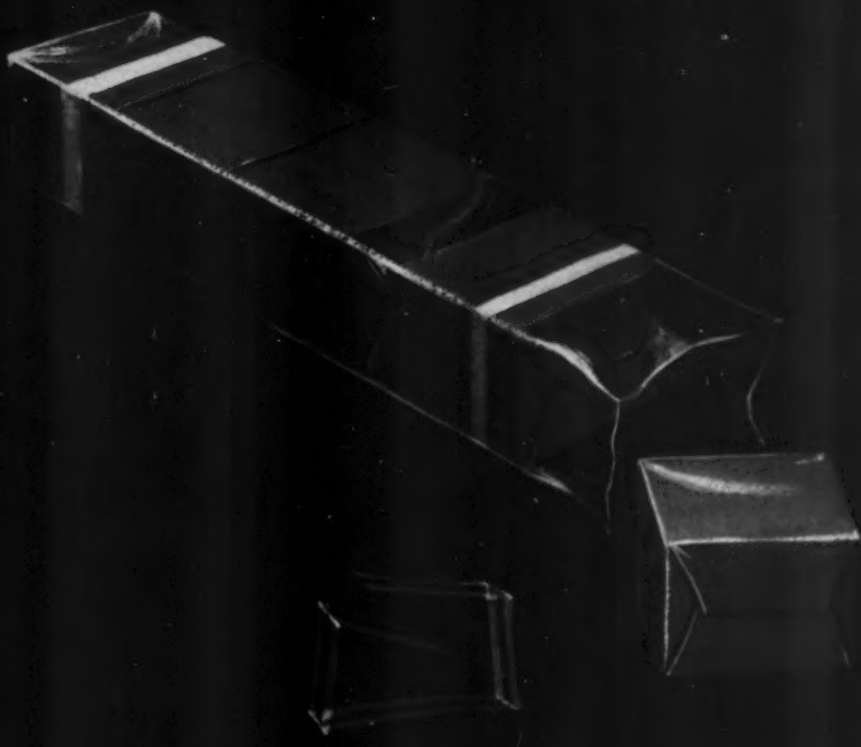
SEE US at BOOTH 101 at the BOSTON CONVENTION



BUHLER BROTHERS, INC.

Engineers for Industry Since 1870

2121 STATE HIGHWAY #4, FORT LEE, NEW JERSEY



ARMOLA

Like to cut production costs?

Then test Armola and see how to save money without sacrificing quality. That's exactly what this Armour shortening was designed to do, plus giving you stability, chewiness without stickiness, high melting point and long shelf life.

For proof by a demonstration right in your own plant, write to: **Refinery Sales Department, Armour and Company, Chicago 9, Illinois.**



ARMOLA

THE WORLD'S FINEST FRUITS AND MATERIALS
Make The World's Finest Flavors



ATLAS **TRUBASE** Imitation Fruit Flavors

With a major base in true fruit flavors fortified with expertly blended synthetics to insure lasting taste and aroma, the TRUBASE line gives candy, especially fondants and fillers, real fruit taste at lowest cost.

We maintain one of the largest research laboratories in the extract field. You are invited to consult our research chemists and technical staff in the development of any flavor needed to meet your specific requirements.



KOHNSTAMM & COMPANY Inc.

ESTABLISHED 1901

89 PARK PLACE, NEW YORK 7 • 11-13 E. ILLINOIS ST., CHICAGO 11 • 2632 E. 84 ST., HUNTINGTON PK., CALIF.
BRANCHES IN OTHER PRINCIPAL CITIES OF THE U.S.A. AND THROUGHOUT THE WORLD

CLIP TO YOUR LETTERHEAD

Please send us details on ATLAS FLAVORS

for

Name

Title

Hum
late

Th
of c
PMC
Mr.
and
peru

Ha
an
Ha
M
tiv
De
Ha
M
Fr
or
Co
Ha

labor
ity o
the
dele

for

Proceedings of the 10th PMCA Production Conference

Editorial Staff

Human Relations, L. Russell Cook, Ambrosia Chocolate Co.

The fact that human relations is the only ingredient of candy making not previously discussed in the PMCA Conferences led to its inclusion at this time. Mr. Cook's most excellent address reflected much time and effort expended. Executives may well benefit from perusal of the bibliography listed by the speaker.

Human Relations, Dr. Woodrow W. Pate, Biscuit and Cracker Baker; July, 1955.

How To Get Others To Do More . . . And Enjoy It! Motivation Committee of National Sales Executives, Inc., 1955.

Dilemma In Human Relations, Abram T. Collier, Harvard Business Review, Sept/Oct., 1955.

Making Human Relations Work, Elizabeth and Francis Jennings. "Human Relations, Rare, Medium, or Well Done?" President and Fellows of Harvard College.

How you handle your human relations and your labor problems has a very definite effect on the quality of your goods, the efficiency of your operations and the looks of your P & L statement. But no one can delegate to anyone the proper conduct of his relations

with others, and the manner in which his influence on others will affect the profitable conduct of his business. Human efficiency is estimated at only 30% of possible performance.

There are four basic dimensions in human relations, (1) Be true to yourself, (2) Know yourself, (3) Love your neighbor, and (4) Seek ye the truth. There are three practical areas in which these generalities must be applied, as (1) Communications, (2) Influencing the attitudes of others, and (3) Guiding your own interests.

Communications is a two way street, travel in each direction is important. The attitudes with which any man looks at his fellows, bosses, his job, etc., reflect the way he has found most effective in satisfying his own needs. You can satisfy man's attitude toward what is the best way to satisfy his needs. Man's needs may be listed as four, (1) Security, (2) Recognition, (3) Sense of belonging, and (4) New experiences or growth. Guiding our own attitudes is the most difficult, yet the most productive of success in all other areas. Half of each individual human relations problem is with the other fellow, and can be discussed with impersonal objectiveness. The personal half that is our own is the one that we are too likely to take for

granted as being already perfect and solved. Guiding your own attitude by applying the Golden Rule equally through your own eyes and through the other fellow's will accomplish the best job of producing efficiently and profitably, and of doing it in a happy atmosphere of good fellowship and satisfying fulfillment. We must each recognize that, viewed with this attitude which we must both practice and teach, the company's welfare and the individual's are parallel. Do not subjugate the needs of the company to those of the man, or vice versa. There is a way to satisfy both. See each man's problem, your colleague, your boss, and your company through his own eyes as well as through your own before you take action. Acquire that capacity; apply it with confidence and hard work; and Human Relations problems will not be problems, but opportunities for greater profit, broader growth, and a better life.

Continuous Heat Transfer and the Confectioner, John P. Bolanowski, The Girdler Co.

In transforming raw ingredients into a host of confections, there is one very vital, basic and fundamental operation that must be performed. This is the transferring of heat energy into or out of the various ingredients to make the desired goods. The essentiality of heat transfer behooves any using manufacturer to eye such operations on the following basis: (1) Is the most efficient and economical use being made of the steam produced or the refrigeration supplied? (2) How well and how easy may hour by hour control from one operator to another be maintained of desired characteristics such as texture, water content, clarity, inversion, color, caramelization, viscosity, density and crystal size? (3) Is the process or operation continuous? (4) If it is a batch operation, would conversion to a continuous procedure be advisable? (5) If the procedure now includes evaporation, or caramelization, could it be eliminated? (6) How well does the system lend itself to sanitation?

Two slides were shown, one of a continuous chocolate tempering flow system, and one of the continuous processing of starch jellies, both using Votator equipment. One slide was shown of the Votator heat transfer apparatus.

Efficient heat transfer is a result of presenting a comparatively small amount of product in a thin layer to a relatively large heating or cooling area, agitating vigorously, and rapidly removing the product film next to this area. Film removal is a cardinal feature of good heat transfer. It has been established that immediately adjacent to the heat transfer wall, a stagnant, residual film resists removal.

The efficiency of a heat transfer operation is a function of: (1) the effective removal of the product film from the heat transfer wall, (2) the degree and nature of the agitation and turbulence administered during processing, (3) the quantity and quality of the heat exchange metal surface, (4) the thermal conductivity of all ingredients involved plus the resulting compounds formed during processing, (5) the viscosity of the ingredients during processing, (6) the judicious

and practical application of insulation to eliminate or reduce losses due to radiation.

To convert a batch operation to a continuous one entails more than just the availability of continuous heat transfer apparatus. The premix preparation must be pumpable, the formula modified to eliminate moisture not required in finished goods, completely blended excluding air, and where cooling of the product is to result in controlled crystallization, all liquifying ingredients must be molten or in solution. The function of all ingredients in the formula must be understood, and minor changes made to adjust to the equipment. Pilot plant runs determine optimum temperature conditions for the process. They also indicate amount and type of equipment.

A recent development is the continuous production of fudge. The procedure consists of making a premix of all the ingredients in a jacketed vessel equipped with suitable agitation to do a complete blending job. This premix, containing the ingredient percentages required in the finished goods, is preheated in the kettle to 160 F. from which it is pumped to and through a continuous heater and cooler. Pilot plant tests showed that heating to 290-295 F. and cooling to 145-150 F. were satisfactory. These conditions will vary, depending on the product formula, what is required in the final product, and the method of handling the material after it discharges from the cooler.

Continuous Candy Cooking in TURBA FILM Process Equipment, Calvin L. Rasmussen, Rodney Hunt Machine Co.

The basic principles of these new evaporators are the thin turbulent film and the short time which the materials are in process. These conditions may be maintained automatically by proper instrumentation, which results in a higher quality finished product, especially with vital heat-sensitive ingredients. The desired concentration is accomplished in a single pass requiring but seconds. No loss of material occurs and foaming is no problem.

Caramels may be made continuously by using a continuous caramelizer prior to the evaporator. This is done by heating to 300 F., holding for three minutes to produce desired caramelization, and then passing the material through the evaporator where the excess moisture is removed. The finished product emerges from the unit at about 190 F. after an evaporating time of about 20 seconds.

Operating conditions may be varied when processing caramels so that feed rates from 4,000 to 8,000 pounds per hour may be obtained. Hard candy feed rates may vary from 2,000 to 4,000 pounds per hour with a moisture content of less than one percent, in some cases, of less than one-half of one percent.

The short contact time in processing produces a product of better color and flavor, higher nutritional properties, and of better keeping qualities.

No deposits or build-up occur on the heating wall of the evaporator. Cleaning of the unit is easily done by flushing with water. Maintenance is very low, normally only periodic inspections are necessary for maximum operation.

Improved Candy Making Through Radiant Cooling, Edwin H. Morgan, Reflectotherm, Inc.

All substances radiate at all times unless they are perfect reflectors. The release of radiant energy from a body is in proportion to the fourth power of its absolute temperature. The earth is being radiantly heated by the sun, but the sun is being radiantly cooled. If a tunnel could be designed to capture the radiant energy released from a candy, we could improve the over-all efficiency of the tunnel and shorten the cooling time.

At present, the vapor permeability of chocolate cooled by convection and radiant cooling is being investigated. Previous studies have been made on chocolate coatings, cocoa butter, and coated creams. Differences in finished products are quite pronounced. Hard candy has been effectively cooled in radiant tunnels. In most cases, it may best be cooled by combination radiant and convective equipment. In the case of candy canes, it is highly desirable to remove heat quickly. A radiant cooling tunnel will reduce the required time 30 to 50 percent.

Water icings or protein-type coatings can differ radically due to the type of crystallization occurring. Fast crystallization will produce a multitude of fine crystals with a high gloss. The fine crystalline structure is much less permeable and tends to isolate the center from the ambient conditions. The secret of fast crystallization in sugar solutions lies in the quick removal of the excess moisture. A dry atmosphere is of prime importance, however, radiant heating is highly desirable to provide the necessary heat of vaporization. In a matter of seconds the crystallization will be accomplished. Where gelatin or albumen are used it may be quite desirable to follow up with cooling to give added firmness to the coating for packaging.

The Qualities in Candy for Which a Buyer Looks, Charles F. Nickel, H. C. Bohack Co., Inc.

"Gentlemen, maintain complete integrity in your production processes," according to Mr. Nickel, is a summary of his address.

As a candy buyer, Mr. Nickel is interested in the appearance, taste and point of origin. He wants to know all he can about the manufacturer, his reputation, business rating and his plant, especially in regard to cleanliness.

Certain magazines recently adversely affected candy consumption by reprinting default decrees or pleas of guilt for violations of U. S. Pure Food and Drug Laws. Although simple explanations may be in back of these charges, the effect on mothers reading about these citations is bad.

Mr. Nickel looks at package design, size and shape of box or bag in relation to weight of contents. Bags, made to look large by use of oversize top tags or labels but slack filled, are outmoded. The quality of the cardboard used in boxes may be checked by tasting or smelling, and if a musty flavor is imparted to the candy, inferior board has been used. Box manufacturers have made tremendous progress. A new stabilized boxboard is said to be particularly suited for candies with a high fat content. Impregnated with

an invisible, tasteless, odorless chemical, the board retards rancidity of fats and oils.

Mr. Nickel tries to be alert with regard to package changes if intended for better looks or protection of contents. He likes the extra protection afforded candies by new films, Saran and Mylar. The strength, clean looks and nice feel of these wraps are distinct advantages in the "self sell" appeal of candy products. A printed bag is preferred to a plain tagged one. Prepricing is to be encouraged wherever possible.

The legally required description of contents, weights and ingredients is becoming smaller and more difficult to read. Since the ingredient label contains helpful information to buyers, suspicion is aroused against the manufacturer when too small a type is used.

"Sampling the sample" is an important part in the buying of candy. Questions in the buyer's mind may be: (1) Is the sample run of the mill or a dressed up one? (2) Is the product overweight, underweight or just right? (3) Is box or bag properly marked so store personnel knows what to reorder? (4) Is the shape of the piece suitable for youngsters and adults, free of sharp edges, easy to bite into or freely rolls around in the mouth? (5) Is appearance of the piece appetizing? (6) Is the character of the flavoring too weak, too strong, or correct for its type? (7) Is the flavor, smell and taste, clean, wholesome, truly delicious? (8) Will the selling price, based on cost plus a fair profit markup, represent good value to the consumer? (9) Will the product give consumer satisfaction and thereby invite constant repeat business? Extra questions might concern thickness of coating, degree of sweetness, smoothness of centers, and pure chocolate versus summer coatings.

Once orders are placed, the kind of service rendered by manufacturers is important. Supermarket business calls for tight operation. Because profit is small, efficient service is demanded. A buyer must get sufficient merchandise on time.

Mr. Nickel is interested in products with a new flavor, new appearance and a new taste sensation. He knows that research is dispelling the theory that candy causes tooth decay. But Mr. Nickel has not been impressed by the dietetic candies examined.

Edible Fats for the Manufacturing Confectioner, Peter Kalustian, E. F. Drew & Co., Inc.

The manufacturing confectioner has used edible fats and oils for years but has not been fully informed about the products nor fully aware of his needs. Likewise, the manufacturers of these products were not sufficiently informed and lacked application facilities for developmental work. In recent years a growing mutual awakening by all concerned has been having a desirable effect and more acceptable consumer products with attendant economic gain for all manufacturers will undoubtedly result.

Fats and oils consist essentially of triglycerides. The glycerides of natural fats are highly mixed. These fats can be processed, blended, modified and reacted with each other in numerous combinations to produce desired products for the confectioner. Tailor-made fatty acids may be synthesized with glycerol into precise products.

An ordinary vegetable shortening made from soybean and cottonseed oils is suitable for almost any general edible fat application, such as chewy confections, fudges or fondants. However, if a product having improved keeping qualities is desired, an all-hydrogenated all-purpose shortening should be used. This product is suitable for use in oil-roasting of nuts.

Vegetable shortenings of increased stability and a higher smoke point than regular shortenings are available for nut roasting as well as the more common oils, such as peanut and cottonseed. A modified coconut oil of reduced foaming properties and a higher smoke point than ordinary coconut oil is on the market. Nuts fried in this oil have lessened sweating and bleeding tendencies and are more compatible with confectionery coating.

The monoglycerides, emulsifiers, have had the approval of the F. D. A. for use in confections and coatings. These are available in two forms, a shortening-type plastic and flaked forms. Through their use, candies have improved texture, smoothness and compatibility.

A fully refined, deodorized coconut oil is the preference of quality-conscious confectioners for a lubricant in caramels and similar candies. Variations are available, having melting points of 90 F., 100 F. and 110 F. The quicker-melting characteristics of coconut products imparts a pleasing, cooling sensation in the mouth without a trace of prolonged chewiness or waxy residue.

Although cocoa butter is the most important fat used by the confectioner, little thought was given towards improvements of the product for years. The biscuit manufacturers were the first to realize the inadequate shelf life of chocolate coatings. During the last 20 years, the tremendous commercial development and wide acceptance of hard butter has been due to the high standards of quality maintained by the processor. In the field of hard butters, the objective has been to retain all the desirable characteristics found in cocoa butter and yet eliminate the undesirable ones. Many types of these products are available. Active research and development programs are being continued in efforts to make hard butter from fats and oils other than those containing the lauric fats.

The Application of MYLAR in the Confectionery Industry, C. Robert Morrison, Mohawk Supply Co.

There are no more severe requirements found for belting than in the manufacture of chocolate candy. A carrying belt or plaque must possess nine separate characteristics in order to produce economically a quality candy product.

The ideal cooling tunnel belt or plaque must have three basic properties: strength, flexibility and abrasion resistance. Other properties desirable are: stability, heat transfer, smoothness of surface, grease resistance, non-absorbancy and crack proofness.

MYLAR (polyester film) belting in six mil thickness has a tensile strength about one-third as strong as equal thickness of machine steel, or 150 pounds per inch in width. This strength compares favorably with a two ply woven fabric. The MYLAR belt has

shown itself to have more than enough strength to do the job under actual operating conditions. Consideration of conveyor belt strength must include the joint strength. A strong joint may be obtained through use of a special liquid adhesive. MYLAR flexibility is very great, tests indicate ten years or more of continuous operation without excessive flexing damage may be expected. Severe abrasion scratches the surface of MYLAR. However, tunnel belts show no evidence of wearing thin after six months operation.

MYLAR will not stretch until stresses of more than 100 pounds per inch of width are applied. Temperature ranges of from minus 40 to plus 160 F. and relative humidity ranges from 20% to 92% leave this belt unchanged in length or width. This desirable property necessitates care in installation; lack of ability to compensate for itself in poor alignment, must be understood.

The heat transfer through MYLAR is more rapid than through any type of fabric because the plastic film lacks the small air spaces which, in fabrics, act as good insulation barriers. MYLAR has less insulation value than any fabric.

The greatest property of this belting is its smooth surface. This smoothness is not due to any coating and hence will not wear off. The resistance to oil and grease is excellent. In actual tunnel belt applications, the MYLAR belt has shown no effect from contact with cocoa butter after six months operation. Plastics are not inclined to absorb liquids. MYLAR samples immersed in water show very slight gain in weight. Because of its flexibility, stability, and resistance to oil and grease, MYLAR will remain free from cracks.

The Value of Auxiliary Inspection, Ferdinand A. Korff, Baltimore City Health Department.

The constant struggle to maintain supremacy among the various forms of animal life has been present since man first began life on earth. In this battle, there is a constant striving for food by all types of animals. The lower forms of plant life, bacteria, molds, yeasts and other microorganisms, also need food. Insects and rodents have considerable difficulty in obtaining carbohydrate foods.

This battle of guarding the carbohydrate-containing food product must be a continuous one, over 8,000 hours per year. Once pests enter the food factory or storage warehouse, food is contaminated. To free the food manufacturing and storing area of these pests is a costly operation.

The regulatory inspection provided is inadequate and the trend is for industry to police itself to prevent destruction and contamination of its products. Supplementing the official guardians of your plant, furnished by Federal, State and local agencies, an amount of man power and equipment must be supplied by each food manufacturing, processing and distributing company. These auxiliary industry-paid personnel, amply equipped with knowledge of the habits of pests and protective measures, are the most effective guardians of your food and my food.

The auxiliary inspector is not only a privately employed pest control operator but engages in preven-

tive procedures to eliminate esthetically objectionable and physically hazardous structure. He must be directly under the administrative officer. He must maintain liaison with the plant engineer and approve repair and improvement operations. He must be in constant contact with the receiving department, the production operations, storage areas and sales procedures. His job consists of ever looking ahead for hazards to structure, premises and product that may develop, and prevent these hazards from occurring. His observations must extend to the source of raw materials, both food and non-food, and to the retail outlet of the final product.

Four methods may be used in organizing or continuing auxiliary inspection of your plant: (1) assign an employee with full authority to fulfill duties yet have plant personnel cooperation, (2) employ a pest control operator to carry out usual pest control measures and report in writing to management needed sanitation improvements, (3) contract with a consulting laboratory for the specific job of establishing a quality control program and maintaining supervision over plant operations, and (4) hire a sanitation consultant to make job studies and organize specific job operations for each individual including maintenance and janitorial personnel. Each of the above working alone will sensitize the food establishment owner to needed improvements in storage and processing operations. Dependence upon one or more of the four mentioned procedures will eventually be required. No auxiliary inspection is complete and effective until what is done step by step is recorded and reported. Discuss your plans with the regulatory agencies; they will assist you.

The first stage of auxiliary inspection considers company-owned facilities. At the second stage, visits must be made to sources from which various materials are purchased. A third stage includes the same activities in retail outlets where the products reach the consumer.

Auxiliary inspection is a preventive procedure. It is not costly. The procedure will minimize your operational costs and allay anxiety confronting executives in these days of modern law enforcement and keen competition.

Calculations for use with Sugar Products, Louis Lang, The National Sugar Refining Company

Dr. Lang explained the term Brix as used in describing sugar solutions. He described the various calculations a sugar user should be familiar with in order to compensate for changes in sugar content and temperature.

Generally, the usual small variations found in the brix and temperature of sugar syrups are not important enough to warrant compensation in factory operations. Actually, the variations are smaller than the margin of error in most volumetric measuring devices. If, however, they must be within a very small margin, a set of conversion tables is necessary.

Dr. Lang recommended the book "Polarimetry, Saccharimetry and the Sugars" available from the U.S. Printing Office, Washington, D.C. It gives the basic data needed to adjust varying conditions to a factory set standard.

This adjustment of weights and volumes may be necessary in balancing the records of the purchasing department and the production department. Since temperature changes alone can cause up to a 1% change in volume of a given amount of sugar syrup, they could cause a noticeable difference between amount received and amount used.

Regular checking of liquid meters should be done, preferably once a week. A few 50 gallon drums should be used. They should be weighed empty, filled through the meter, then weighed again. A brix reading of the syrup and reference to the tables will give the exact amount metered, to be compared with the amount shown on the meter.

Dr. Lang also described the method of either diluting or concentrating a sugar syrup, also through the use of sugar tables.

EDITOR'S NOTE

A rather complete report of Turba-film equipment, as briefly described in the talk by Mr. Rasmussen, is contained in an article in *THE MANUFACTURING CONFECTIONER*, November 1952.

A more thorough discussion of radiant cooling is contained in an article "Crystallization Control Through Radiant Cooling" in *THE MANUFACTURING CONFECTIONER*, January 1956.

A thorough description of the Votator types of heat exchange equipment is given in an article in *THE MANUFACTURING CONFECTIONER*, August 1952.

Headquarters—for News

That's just what Booth #130 will be at the National Confectioners' Association Convention in Mechanics' Hall at Boston.

Because right in our Booth we'll have our Special News Wire . . . can give you the latest on cocoa, sugar, and market conditions in general all through the day.

Naturally, you're invited to check at Booth #130 whenever you like—pick up your own free copies of the interesting pamphlets available.

Merrill Lynch, Pierce, Fenner & Beane

70 Pine Street
NEW YORK 5, N. Y.

18 Milk Street
BOSTON 9, MASS.

Offices in 107 Cities

Program of the Annual Convention

Associated Retail Confectioners

June 10th through 14, 1956

Somerset Hotel, Boston, Massachusetts

SUNDAY, JUNE 10, 1956

2:00 P.M. Registration—West Function Foyer.
 2:00 P.M. to Preview Allied Trades Exhibits—Charter House Room.
 6:00 P.M. to President and Mrs. Oliver's Reception for New Members—The Oliver Suite.
 5:30 P.M. to President and Mrs. Oliver's Reception for New Members—The Oliver Suite.
 7:00 P.M. House of Friendship—Louis XIV Ballroom (Self-Treat Cocktail Party, Buffet Supper and Entertainment).
 Reception Committee: Mrs. Olin Brown, Chairman

Mrs. Robert Beierl
 Mrs. Howard Vair

Music and Entertainment, courtesy of:
 Walter Baker Division—General Foods Corporation.
 The Nestle Company, Inc.
 Christo Poulos and Company.

MONDAY MORNING, JUNE 11, 1956

9:00 A.M. Registration—West Function Foyer.
 9:15 A.M. Monday Morning Session—Princess Ballroom. Active Members Only.
 Opening 36th Annual Convention.
 Joseph B. Oliver, Oliver's Candy Shoppe, Batavia, New York, Presiding.
 Roll Call.
 Appointment of Committees.
 9:30 A.M. Annual Report: "A.R.C. in Action in 1955-56."
 Joint presentation:
 William D. Blatner, Secretary-Treasurer.
 Thomas J. Sullivan, Assistant Secretary.
 10:00 A.M. **INDUSTRY SEMINARS**—Princess Ballroom, Lower Level.
 Topic: "Confectionery Merchandising."
 Moderator: Laurance A. See, See's Candy Shops, Inc.
 Table No. 1. Advertising, Special Day Merchandising and Point-of-Sale Displays.
 Clive Hilgert, Russel Stover Candies.
 Table No. 2. Window Displays.
 Chairman, Joanne Peoples, Stephen F. Whitman and Sons Company.
 Table No. 3. Packaging—Regular and Holiday.
 Chairman, Charles H. Welch, Jr., Fred Sanders.

Table No. 4. Store Design and Color Techniques.
 Chairman, May Bender, Lane-Bender, Inc., New York.
 Table No. 5. Retail Personnel Training.
 Chairman, Russell Hanscom, Hanscom Brothers, Incorporated.
 Table No. 6. Sales Contests and Incentives.
 Chairman, Jesse F. Anderson, Stuckey's.
 Table No. 7. Mail Order, Direct and Retail.
 Chairman, Otto Glaser, Dairy Maid Candies.

11:00 A.M. Summary by Discussion Leaders.

MONDAY AFTERNOON, JUNE 11, 1956

1:00 P.M. Luncheon—Regency Room, East Lobby.
 2:00 P.M. Open Forum Discussion of the Seven Subjects Listed Above.
 2:00 P.M. to Visit Allied Trades Exhibits.
 7:00 P.M.
 8:00 P.M. Active Members may begin set-up of their displays for the Wednesday Candy Clinic.

TUESDAY MORNING, JUNE 12, 1956

9:00 A.M. Registration—West Function Foyer.
 Exchange tickets in book for table reservations for Dinner Dance at Registration Desk.
 9:30 A.M. Visit Allied Trades Exhibits—Charterhouse Room.
 10:00 A.M. **INDUSTRY SEMINARS**—Princess Ballroom, Lower Level.
 Topic: "Confectionery Merchandising."
 Moderator: Joseph B. Oliver, Oliver's Candy Shoppe.
 Table No. 1. Bonus, Welfare and Incentive Plans.
 Chairman, Herbert Hern, Betty Dixon Candies.
 Table No. 2. Restaurant, Luncheonette, Fountain and Bakery Operation.
 Chairman, Thomas Shattuck, Frank B. Shattuck Company.
 Table No. 3. Candy-Making and Formulas.
 Chairman, Peter Laureys, Loft Candy Corp.
 Table No. 4. Production Planning and Control.
 Chairman, John A. Mavrakos, Mavrakos Candy Company.

Table No. 5. Cost Computation and Pricing.
Chairman, Edward Gaebler, Gaebler's of
Kansas City.

Table No. 6. Roadside and Shopping Center
Retail Operation.
Chairman, Arthur Connelly, Old Salem
House Candies.

Table No. 7. Small Store Operations.
Chairman, Howard Vair, Vair-E-Best Can-
dies.

11:00 A.M. Summary by Discussion Leaders.

TUESDAY AFTERNOON, JUNE 12, 1956

1:00 P.M. Luncheon—Regency Room, East Lobby.

2:00 P.M. Open Forum Discussion of the Seven Sub-
jects Listed Above.

3:30 P.M. Complete Setting Up Candy Clinic Displays.

3:30 P.M. to Visit Allied Trades Exhibits—Charter House
Room.

8:30 P.M. A.R.C. 36th Annual Dinner Dance—Louis
XIV Room.

Music and Entertainment, courtesy of:
Walter Baker Division—General Foods
Corporation.

The Nestle Company, Inc.
Christo Poulos and Company.

WEDNESDAY MORNING, JUNE 13, 1956

9:30 A.M. Active Members will Preview Candy Clinic
Displays, and study exhibits which must
not be handled or removed.

10:00 A.M. Visit the Allied Trades Exhibits, Charter
to House Room, West Function Foyer.

3:00 P.M. Get your prize books stamped.

12:00 Noon Luncheon, Members and Guests—Regency
Ballroom, East Lobby.

WEDNESDAY AFTERNOON, JUNE 13, 1956

1:00 P.M. Princess Ballroom, Lower Level.

Report of Nominating Committee.
Election and Installation of Officers.

1:30 P.M. Active Members Only—CANDY CLINIC.

to Presiding: James W. Sotus, Sotus Candy
Company.

5:30 P.M. In addition to our regular Candy Clinic, the
following Candy Merchandising Displays
for special days will be presented:

Mother's Day	Birthdays
Father's Day	Valentine
Sweetest Day	Halloween
Summer Time	Christmas
Easter	Thanksgiving

At the close of the Candy Clinic, each person
will receive a carry-home box for sampling
the displays presented at the Clinic.

5:30 P.M. Drawing of Attendance Prizes—Allied Trades
Exhibits—Princess Ballroom.

THURSDAY, JUNE 14, 1956

* Post-Convention Bus Tour to New England
Roadside Candy Operations

9:30 A.M. Leave Somerset Hotel, West Lobby Entrance.

1:00 P.M. Luncheon at the famous Ship's Haven Res-
taurant, Lynnfield, Massachusetts.

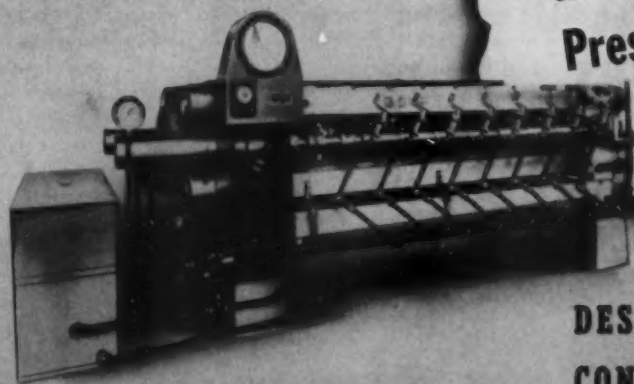
5:00 P.M. Hebert's Candy Mansion.

Cocktails and hors d'oeuvres as the guests
of Mr. and Mrs. Frederick E. Hebert.

8:30 P.M. Return to Somerset Hotel.

* IMPORTANT: Purchase Special Bus Tour Tickets at
Registration Desk—\$6.00 Per Person, Including Lunch-
eon.

STANDARD
THROUGHOUT
THE WORLD



Every major advancement
in the design of Cocoa
Presses has a CARVER
patent behind it.

FRED S. CARVER INC.
HYDRAULIC EQUIPMENT

RIVER & CHATHAM RDS., SUMMIT, N. J.

LONDON-BAKER PERKINS LTD.

DESIGNED with Experience
CONSTRUCTED with Precision
SERVICED World-Wide

There is a variety of sizes of Carver Cocoa Presses to
meet every requirement. We solicit your inquiries.

Visit us at Carver Booth No. 3—NCA—Mechanics Hall, Boston, June 10-14

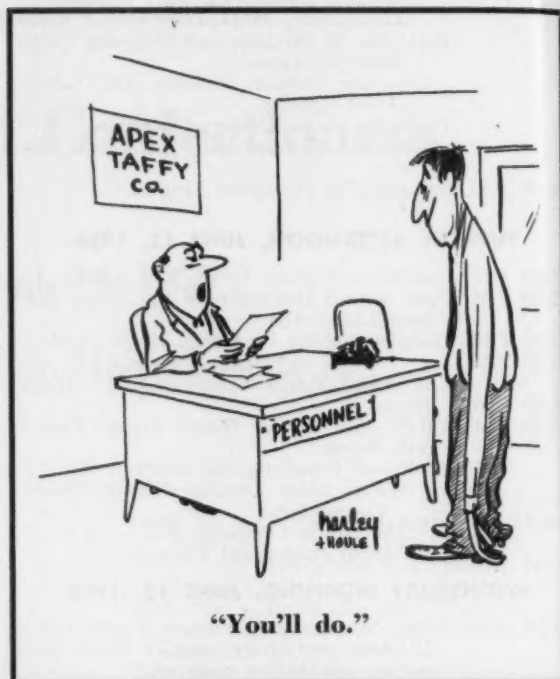
SUGAR REPORT

by Charles Fuchs

A very quiet period has developed in the Eastern market since the 10 point advance of several weeks ago. Most buyers are liquidating inventories accumulated at that time and a normal business is expected again very shortly. The policy of purchasing only necessary requirements, which has now been in effect for many months, is expected to continue.

The recent 100,000 ton quota increase apparently took the edge off the market for a slight reaction has since taken place and raws have declined from the high. In addition, the Exchange at this writing is somewhere in the middle between the low and the high and total fluctuations have only been 10 to 14 points, at least in the July, September and November positions which are currently being traded in on the Exchange. As far as actual raws are concerned, the top was 6.09, the bottom 5.80 and it is expected that sugars will sell around the 6.00 level.

No important changes are anticipated in the immediate future and it is interesting to note that in spite of unseasonable weather, which must have retarded consumption somewhat, deliveries through the middle of May were in excess of 200,000 tons ahead of last year's for a similar period.



MERCKENS

Makers of Fine Chocolate and Cocoa

MERCKENS CHOCOLATE COMPANY, INC.

185 Great Arrow Avenue, Buffalo 7, New York

BRANCHES AND WAREHOUSE STOCKS IN

Boston, New York, Chicago, Los Angeles, Oakland, Salt Lake City, Seattle

I
pro
thes
glyc
of c
of lo
high
to p
not
abo
pro
fect
olat
T
of a
the
cro
con
by
on
ing
adv
wh
diff
erti
a so
I

for

Tempering Procedures— Thermal Analytical Studies

by W. MARVIN COCHRAN and MELVIN OTT, *Durkee Famous Foods*

In recent years, technology has given us many new processes producing new useable fat products. Among these processes are the acetylation of mono and diglycerides to form new acetyl glycerides, esterification of component fatty acid with glycerine, replacement of lower fatty acid homologs from lauric type oils with higher fatty acids and interesterification of fat blends to produce new and useful Confectioner's Fat. It is not the intent of this discussion to elaborate on the above processes, but rather to discuss the tempering process associated with products produced for Confections Coating along with Cocoa Butter and Chocolate.

The tempering process will be followed by the aid of a technique called "Thermal Analysis", coupled with the storage stability of enrobed centers and photomicrographs of stable seeds formed under tempering conditions. A need for tempering has been evidenced by incidents of the development of bloom or dulling on many coatings, and several procedures for tempering Confectioner's Hard-Butter Coatings are being advocated. We have tried to determine what happens when a coating is tempered and to see just what differences exist in the structure and physical properties of a solidified fat when it has been set from a so-called tempered state.

It has been generally accepted that to obtain a stable

Confectioner's Coating (as with Chocolate), a certain amount of seed crystal had to be formed in the coating fat before enrobing the coating about a center. However, it has also been evident that simply seeding out a portion of the fat before enrobing did not always guarantee a coating against bloom or loss of gloss. Heating or melting curves run on a thermal analyzer give some indication as to why this is true. Apparently not only seed has to be formed in the coating fat prior to enrobing the coating about a center, but the seed must assume a stable crystal form or polymorph. A seed crystal shocked rapidly out of a fat by quick cooling seems to come out in the so-called alpha or a lowest melting point. As this is an uncomfortable, metastable form, in a short while it will change to the higher melting beta or beta prime form.

A coating apparently is not ready and should not be enrobed until the seed crystal, which has been removed from the tempering fat, has assumed its highest melting point or more stable form. As the rate at which seed crystals change from one form to the other is variable and not necessarily known for each high melting triglyceride that exists in a coating fat, we have up until now been able to determine only by trial the approximate minimum time it will require for seed crystals to assume the stable form. The ther-

mal analyzer gives us a method for measuring more accurately the polymorphic characteristics of fat, and the time required for polymorphic changes to take place.

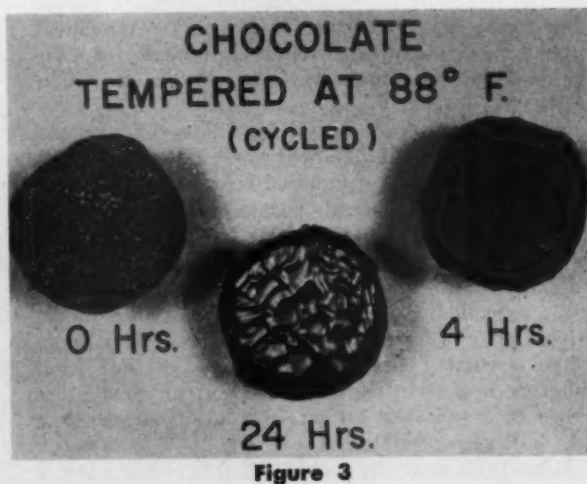
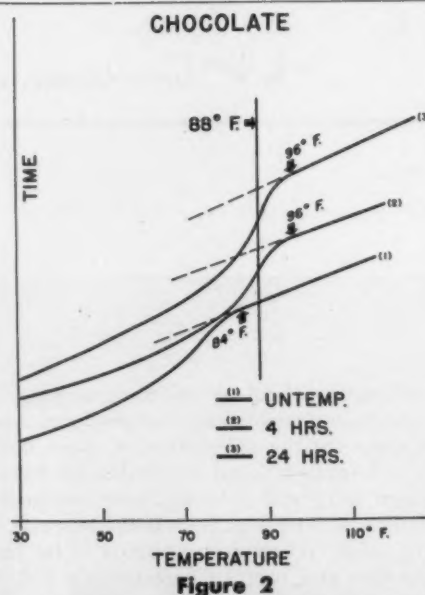
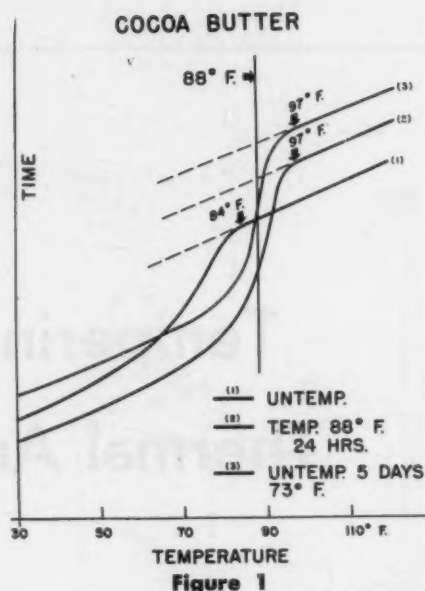
It is important to know the form the seed crystal is in, because this determines the form that the balance of the fat crystals will assume when the coating is finally set. In other words, if the seed crystal is predominantly in a beta prime form when the coating fat is set up, the other fat crystals which form on subsequent cooling will likewise assume a beta prime or highest melting form, and the coating will be stable against bloom or dulling. Bloom and dulling are caused, at least partially, by fat crystals changing from one form to the other in a solidified coating. We will demonstrate with melting curves the difference that exists in melting points of fat and the difference in amounts of seed crystals of the more stable higher melting form that exists in a fat which has been tempered before setting and one which has been set directly from the molten state without any tempering.

Figure 1—This slide represents thermal curves on Cocoa Butter which has been set up with and without temper. Curve 1 represents Cocoa Butter which has been rapidly chilled from the melt to 30° F. The slope of the curve at the lower temperature is a function of a specific heat of the solid and liquid content of the fat. An increase in slope indicates a phase transformation of solid to liquid due to the latent heat of melting of solid triglycerides. When melting is completed, we again have a constant slope which is a function of the specific heat of the liquid phase.

Curve 1 shows that untempered Cocoa Butter starts melting at approximately 60° F. and has completely melted at 84° F., which is the indicated melting point. Therefore, no solids would exist at enrobing temperatures of 88° F. or higher. The Cocoa Butter has set up in unstable forms (mainly alpha) which have melting points of 84° F. and lower. Curve 2 represents the same Cocoa Butter which has been tempered by stirring in a thermostatically controlled bath at 88° F. for 24 hours. Here one readily sees that very little melting has occurred below 80° F. and that the final melting point of a tempered sample has been elevated to 97° F. Here it can be seen that a large concentration of stable seed is present at temperatures above the tempering temperature represented by the vertical line. It is definitely indicated that this sample is now in temper.

Curve 3 represents an untempered sample chilled to 30° F. and set at 73° F. for 5 days storage. This sample closely approximates the tempered sample indicated in Curve 2 and clearly shows that a large polymorphic change has occurred under storage conditions. This is evidenced by the increase in melting from 84° F. to 97° F. This polymorphic change would be associated with blooming or dulling of stored chocolate.

Figure 2—represents the thermal curves on tempered and untempered chocolate. Curve 1 on the untempered sample again shows the absence of higher melting stable crystals and displays a melting point of 84° F. Again in this chocolate, no stable seed crystals exist, as evidenced by the melting point of 84° F. Curve



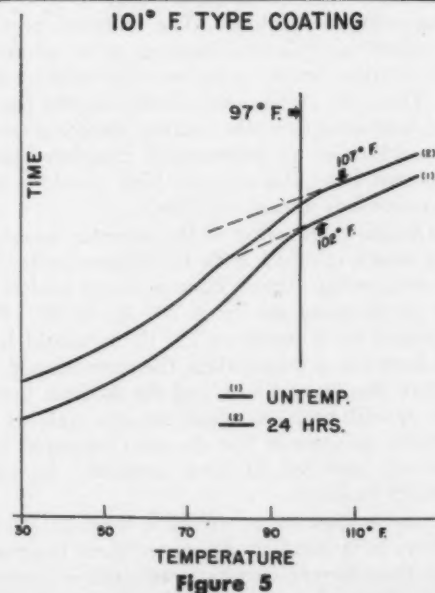
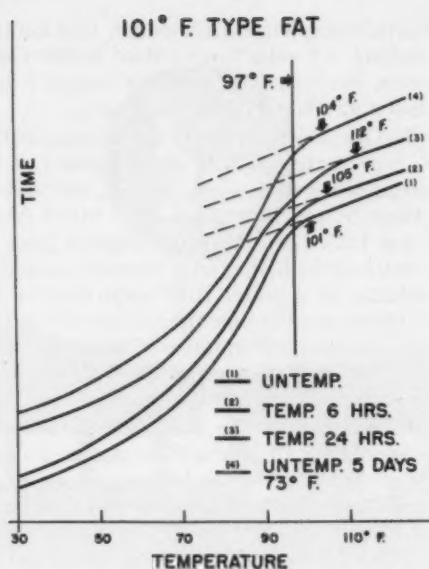


Figure 6

2 shows the effect of 4 hours of tempering on the chocolate. Here the formation of stable seeds has started, as indicated by the higher melting point.

Curve 3 represents a 24 hour tempering of the chocolate at 88° F. Here it is clearly seen that the chocolate has attained proper temper by the larger area under the curve between the vertical tempering line, the extrapolated liquid line and the recorded melting line. Centers were enrobed in the above samples and storage tests run. The results of these tests are given in Slide 4.

Figure 3—Here we have enrobed centers of products mentioned in the previous Slide stored for 2 weeks under cycling conditions from 60° F. to 85° F. and finally for 6 weeks at 73° F. The untempered sample shows a typical bloom as would be expected from the previous curves. The 4 hour tempered sample was in partial temper and does not show the typical bloom but has definitely dulled. The sample tempered 24 hours was in complete temper, as indicated by thermal analysis, and showed excellent storage stability. In this case, sufficient stable seed has been set up to insure the orientation of the Cocoa Butter into its most stable form. Since no polymorphic transformations from polymorphs to higher polymorphs can now occur under storage conditions, this 24 hour tempered sample has maintained its gloss.

We have also applied the same study to a 101° F. type of Confectioner's Hard Butter.

Figure 4—Curve 1 on the untempered sample clearly indicates that very little seed is present above the tempering temperature of 97° F. The melting point of this sample is indicated to be 101° F. If we compare the curve of this untempered sample with the untempered sample of Cocoa Butter, as previously shown, we can readily see that this fat displays relatively less polymorphism than Cocoa Butter. This fact is well known to the chemist who has run Wiley or Capillary Melting Points and dilatometric curves on Cocoa Butter and Confectioner's Hard Butters.

Curve 2 shows the effect of 6 hrs. tempering at 97° F. More stable seed has formed as indicated by the increase in the area between the vertical tempering line at 97° F., the extrapolated liquid line and the heating curve. Here the melting point is 105° F. Curve 3 represents a sample which has been tempered for 24 hours. Here it can be readily seen that the maximum amount of stable seed formation has occurred, as indicated by the increased area under the curves and the rise in melting point to 112° F. The cooling of this tempered fat in the presence of stable seed would insure the whole coating setting up in its most stable form, and dulling would not occur because of the absence of a polymorphic change of lower melting fat polymorphs to higher melting polymorphs.

Curve 4 represents the same fat set in an untempered state and placed at 73° F. for 5 days. It is plainly seen that a polymorphic change has occurred as indicated by the increased area again between the vertical tempering line, the extrapolated liquid line and the melting curve. This is also substantiated by the increase in melting point between the untempered sample run immediately and the untempered sample which has been stored 5 days at room temperature.

Treasure of them all!

FELTON PURE VANILLA

Felton goes right to the heart of the best vanilla areas in the world—Mexico, Madagascar and the Bourbon Islands—for its superb, full-bodied pure vanillas. But that's only half the story... To be worthy of the label "Felton," our vanillas are subjected to endless laboratory control-testing. Only then is Felton ready to offer you its vanilla... the treasure of them all!

For the very best Mexican and Bourbon Vanilla... Made to your own specifications, at the most advantageous low prices.

*We invite you
to try*

FELTON
Pure Vanilla

10-FOLD 4-FOLD
2-FOLD OLEO RESIN
STANDARD EXTRACT

Other blends, strengths • Liberal Samples on Request

Flavors
Essential
Oils
Aromatics

FELTON CHEMICAL COMPANY, INC.

599 Johnson Avenue, Brooklyn 37, N. Y.

PLANTS: Brooklyn, N. Y. • Los Angeles, Calif. • Montreal, Que.
Versailles (S&O) France

SALES OFFICES: Atlanta • Boston • Chicago • Cleveland • Dallas
Philadelphia • St. Louis • Toronto

1 Stock Company, Inc., New York, N. Y.

It is this polymorphic transformation that contributes to the dulling of Confectioner's Hard Butter Coatings. This, again, evidences the need for proper tempering of Confectioner's Hard Butter Coatings.

Figure 5—This slide represents the thermal data on a 101° F. type coating which was tempered at 97° F. This coating was a dark, sweet coating, containing 33% added Hard Butter, 20% Cocoa, 37% Micro Atomized Sugar, and 1/3% Lecithin on the coating basis. Tempering was done as before on a 3 pound sample under slow agitation in a water bath controlled to .02° F. Curve 1 represents the untempered sample and shows very little material melting above the tempering temperature. The final melting point of this material is 102° F.

Curve 2 represents the same sample which has been tempered for 24 hours. Here, again, stable seed formation is indicated by the increase in melting point to 107° F., and again by the increase in the area between the extrapolated liquid line, the vertical tempering line and the melting curve. It is extremely interesting to note here that there is a marked difference in the melting curve in the range of 80 to 97° F., the tempering temperature. The flattened portion of the tempered sample, as compared to the untempered sample in this range, indicates less melting in this range. Thus, the stable seed crystals in the tempered sample have orientated the coating into its most stable form, and little or no polymorphic transformation can be expected from this sample. This should evidence itself in excellent storage stability.

Figure 6—shows the effect of the previous investigated coating when enrobed with no temper and with 24 hours' tempering. These samples were cycled for 2 weeks at temperatures from 60° F. to 85° F. and then placed for 6 weeks at 73° F. As would be predicted from the previous slide, the zero temper would have poor storage stability, and the 24 hour tempered sample would have excellent storage stability. This can readily be seen, in that the zero tempered sample has dulled, and the 24 hour tempered sample has maintained its gloss.

In summarizing then, we have tried to point out that there is a need to do more when tempering a coating than merely develop seed until a correct viscosity is obtained. In the case of a coating made from a Confectioner's Coating Fat, a certain time is required for the seed crystal, which comes out during tempering, to assume its highest melting or most stable form. We cannot forecast precisely how long it requires the higher melting components of all types of coating fats to assume this stable form, but we have shown with curves that the time required for one butter was something over 6 hours.

We, therefore, recommend that a coating be held under agitation for 24 hours at a temperature somewhere around 4 to 5° below the Wiley Melting Point of the fat used before enrobing, to assure the formation of a stable seed crystal, which, in turn, orients the formation of similar stable crystals in the balance of the fat when it is crystallized out during subsequent cooling in the tunnel. Solidified Coating Fat, which contains nothing but stable form crystals, is highly resistant to bloom and dulling.

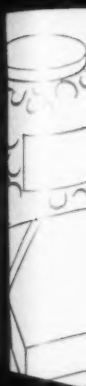
es
s.
g
a
F.
/
ed
n-
er
F.
vs
n-
is

as
ed
nt
ea
n-
ly
er-
F.,
of
ed
his
ed
le
an
ce

ed
24
2
nd
re-
ald
ed
his
ple
has

out
g a
vis-
om
re-
ing
ble
re-
of
ave
one

eld
ne-
oint
ion
the
e of
ent
nich
ghly





candy packaging

*Neutralizing
Paperboard Odors*

*Systematic
Cost Reduction*

PUBLISHED BY

**THE
MANUFACTURING
CONFECTIONER**

JUNE, 1956

What film is best by far for bagging?

You simply cannot deny cellophane's *superiority to any other film* for bagging on high-speed machinery.

In fact, cellophane's crispness, body and slick surface are mainly responsible for the development of the wide variety of automatic packaging machinery that is available today.

No other film can match cellophane's smooth, static-free performance, which combined with non-critical heat sealing permits an *uninterrupted* flow of production.

Toughness? American Viscose manufactures an extra-tough, thick cellophane that stands up stoutly under the battering a bag must endure in today's self-service stores.

Yet with all its extra toughness, AVISCO* cellophane still gives you *unclouded* transparency and sparkling dazzle. It's a real shopper-stopper.

We would be happy to discuss with you further why your best bet for bagging is AVISCO cellophane.

American Viscose Corporation
Film Division
1617 Pennsylvania Blvd.
Philadelphia 3, Pa.

*Trademark of American Viscose Corporation

The logo consists of a large, solid black trapezoid. Inside the trapezoid, the word "AVISCO" is written in a large, bold, white sans-serif font. Below it, the word "CELLOPHANE" is written in a smaller, bold, white sans-serif font.

AVISCO
CELLOPHANE

Woodman presents another great PROFIT-MAKER for Manufacturers!

The PLUR-A-MATIC Net Weigher

• ACCURACY • FLEXIBILITY • SPEED

WOODMAN'S new PLUR-A-MATIC makes every second count! One to four scales keep production rolling at high speed . . . give you a weight range from two to sixteen ounces single shot—with quick, easy change-over of product, bag weight and size! *So accurate, it eliminates the need for check weighing each bag!* Let your WOODMAN man tell you at no obligation how this triumph of WOODMAN research will make money for you.

PACKAGING high density products? Woodman's PLUR-A-MATIC is made for them! adapts to the Vibra Wheel Bag Filler for semi-automatic filling, as shown here, the Air-Weigh-Matic Automatic bag filler, and the Vibra Belt box and can filler—fits every phase of your packaging operation.

*Your Woodman Man is
a good man to know!*



Home Office: Decatur, Georgia. Direct Sales
& Service Offices in Portland, Ft. Worth,
New York, Boston, Cleveland, Los Angeles, Chicago,
Kansas City, Detroit, San Francisco, Philadelphia,
Buffalo, St. Louis, Montreal . . . soon in Toronto, Canada

The
WOODMAN
Company



*Clark
Candy Containers
for Sales winning
Counter Displays*

Through matchless brilliance and beauty, fine lithographed metal containers, custom-made by J. L. Clark, provide attractive counter displays which can bring increased sales. Sparkling clarity of color and design assures distinctive packaging that stops the hurrying shopper and whets his appetite to buy. Equally important is the fact that Clark containers are snug-fitting and precision-made to fully protect the products they help to sell. The delicate flavor and freshness of fine confections are always perfectly preserved.

J. L. Clark is prepared to help develop colorful new designs, or adapt existing designs

to our lithographing process. Distinctive containers are available in a wide range of sizes and styles. Write today; our 51 years of packaging experience is yours for the asking. *J. L. Clark Manufacturing Co., Home Office and Plant, Rockford, Illinois; Liberty Division Plant and Sales, Lancaster, Pa.; New York Sales Office, Chrysler Bldg., New York 17, N. Y.*



P ap
ache t
devotes
insurin
in spite
efforts
the glu
too of
expens
words
convert

The
often a
been t
the fin
stock.
difficul

Seco
sour o
is due
action

Thir
coming
Mod
in thei
is cert
drastic
board
each y
thorou

for Ju

The development of a deodorizing agent that masks the typical paperboard odor without imparting one of its own, promises to solve the perennial problem of odor transfer to chocolate candy

Neutralizing Paperboard Odors

by ARTHUR GOLDMAN, *Airkem, Inc.*

Paperboard odors have been a perennial headache to the candy manufacturer. The confectioner devotes constant effort to upgrading his product and insuring its uniformity in taste and appearance. Yet, in spite of diligent work by the board suppliers, his efforts can be ruined by malodors from the board, the glues or the printing inks used in the box. All too often, the malodors are discovered only after expensive boxes have been made—leading to harsh words and, occasionally, litigation between supplier, converter and user.

The major cause for concern is the musty odor so often apparent in the finished board. This malodor has been traced to microbiological activity due either to the finish or developed during the processing of the stock. Closed water circulating systems intensify this difficulty.

Second, from the standpoint of importance, is the sour odor associated with protein breakdown. This is due to enzymes formed by bacterial and fungal action in the finish.

Third is the phenolic or chemical type of malodor coming from an excessive use of sanitation chemicals.

Modern chip-board mills have been very diligent in their sanitation programs. Their finished product is certainly sanitary, since the pulp goes through drastic processing conditions while being made into board and millions of pounds of chemicals are used each year in mill clean-ups. Good housekeeping and thorough cleanliness are most important factors for

odor control, but experience has shown that it is impossible within practical limitations to eliminate paperboard odors by cleanliness alone when other than virgin stock is used.

Adding perfume to the board was among the first expedients tried, but this had to be discarded because the perfumes contributed their own tastes which interfered with the candy flavor. Vanillin was a great improvement over perfumes since it made the paperboard smell more like candy. However, it was found that the trace of vanillin did not block transfer of the mustiness to the package contents. This was understandable since the candy itself already contained much more vanillin than could be picked up from the board.

To solve this problem by killing the malodors with no perfumed effect, many paperboard manufacturers are now adding a new odor control agent* to the board during the papermaking process. This agent acts to neutralize odors within the board to a point below the noticeable level. It is not intended as a substitute for the usual sanitary procedures, or for careful waste paper sorting. Rather, it is intended to deal with those paper odors that cannot be eliminated with even the greatest care on the part of the board manufacturer.

When introducing the odor control improvement to the paperboard industry, it was found that the mill production men were principally concerned with im-

* by Airkem, Inc.



CANDY TREATS

taste fresher
SELL FASTER

when packaged on the Automatic
CAMPBELL
wrapper...

- Wraps 3 to 5 units per second!
- Keeps candies factory fresh
- Wraps without crush or breakage
- Requires no boards—unless desired
- Uses all types of wrap materials
- Heat, glue or crimp seals
- Wraps products of most any shape
- Save labor with 1 person operation



Wraps Americas Leading Candies



Write for brochure.

Campbell
WRAPPER

New York office
35 West 42nd St.

Manufacturers of Machine and Gravity Presses, Folders, Inter-Folders,
Combiners, Wrappers, Embosser, Strippers, Shrinkers, Roll Wrappers, Pouch
Machines, Crepe and Tissue Converting Mills.

proving the physical characteristics of the board—its strength, folding resistance, printability, and similar factors required for packaging. The mill production men believed that the "normal paperboard odor" was just that—normal and to be expected. It has taken considerable educational effort by the confectionery manufacturers and other packagers of odor-sensitive products to convince the paperboard producers that these odors, however normal they might be to paper, were not allowable in sensitive products such as chocolate candy.

Now, control of mustiness and lack of perfume effect are available at low cost to you in your paperboard packages. This will provide another packaging improvement to protect the original quality of your products on their way to the final judge—the consumer.

Editor's Note

The following paragraphs are taken from "A Review of Odor-Judging Methods in Paperboard" by Arthur Goldman, before a technical meeting.

"One of the first steps was to determine relationship between odor intensity and surface area. According to experiments conducted in the basic phases of this work we found that odor intensity in paperboard is a linear function of surface area.

"We have found the following methods of sample preparation produces the most consistent results: the sample boards, of definite area, are wrapped around the inside of standard wide-mouth jars to expose the maximum surface. Glassware must be perfectly clean and the covers must have no rubber, paint or other odor-absorbing material. We prefer glass lids to foil covers since the glass covers are air-tight.

"As little distilled water as possible is used to dampen the board; 50 ml. is ample to saturate the 50 square inches of most board and leave a bit over. The amount of water should be the same for each set of samples."

A complete copy of this paper describing the development of this test, and the statistical methods of evaluating results, can be obtained by writing Airkem, Inc., 241 E. 44th Street, New York 17, N. Y.

BETTER MARKING EQUIPMENT by industrial

FOR PRODUCTION LINE MARKING, DATING AND CODING

Industrial Marking Equipment is engineered to lower your costs—raise your operating standards. It is unmatched for high speed performance, and economical, efficient operation.

Before you make any decision on marking equipment, get full information on Industrial—you'll be glad you did!

Write for the new Industrial catalog—today. Dept. MC

multiwall
bags
pillowtype
packages
cartons
containers
drums
cases
shocks
pails
rolls
cans, etc.

ime

INDUSTRIAL MARKING EQUIPMENT
454 BALTIC STREET
BROOKLYN 17, N. Y.
company, Inc.
Main 4-2601

*Polyethylene bags
are used...*

**"because of their
'keeping quality'"**



Polyethylene packaging for The Cracker Jack Co., supplied by **Milprint, Inc.**, Milwaukee, Wisc., and **Dobackmun Co.**, Cleveland, Ohio.

*It pays to package
in film made of...*

As related by The Cracker Jack Co., Chicago, Ill.:

"The fact that there is no moisture loss to speak of (in film made of **BAKELITE** Brand Polyethylene) is an important factor in keeping marshmallows fresh. Also, the bags are strong and keep intact, reducing breakage losses. And the product can be seen clearly . . . keeping top appeal, especially for colored and flavored marshmallows."

Want more case histories on how to profit with film made of **BAKELITE** Polyethylene? See your packaging supplier, or write Dept. MQ-99 for our "Processed Foods" booklet.

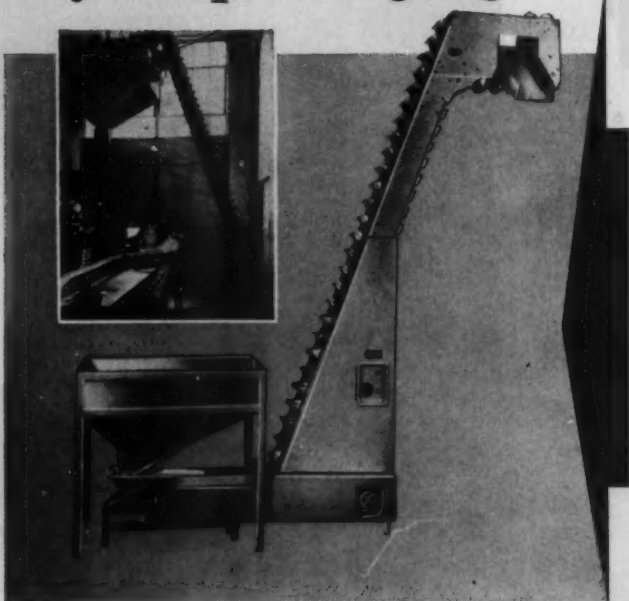


BAKELITE COMPANY, A Division of Union Carbide and Carbon Corporation **UCC** 30 East 42nd Street, New York 17, N. Y.
The term **BAKELITE** and the Trefoil Symbol are registered trade-marks of **UCC**

to bring new economy and speed to packaging . . .

LYNCH

*adds two new members to its family
of fine packaging machines!*

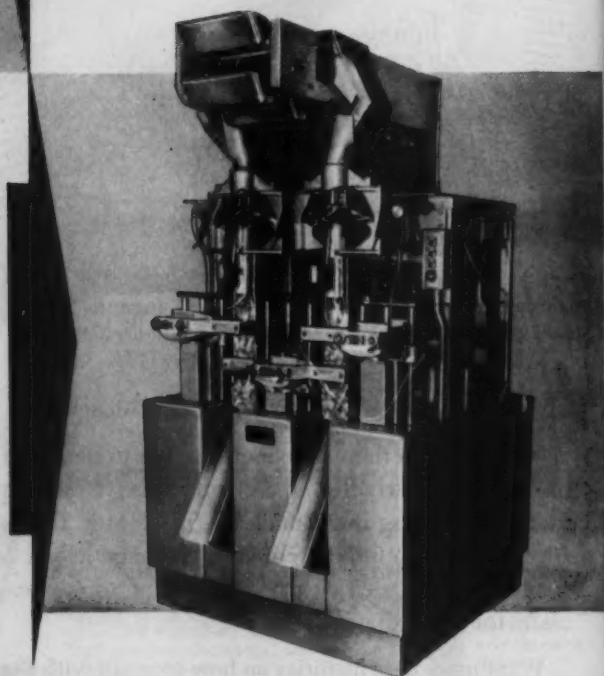


THE LYNCH ROBO-LIFT

This versatile conveyor is specifically designed and engineered to handle bulk materials with the gentle action necessary for many types of food, drugs and chemicals. It operates vertically, horizontally, or both. The compact Robo-Lift is the answer to sanitary conveying and for problems that arise from space limitations. Wherever a bucket conveyor system is indicated, the Robo-Lift fills every requirement. Investigate Robo-Lift today!

THE LYNCH ROBO-WRAP

This new member of the Lynch family efficiently forms, fills and seals food, drugs, candies and novelties in pillow-type packages — automatically, at high speeds. Simple installation, easy accessibility, adjustable variances and accurate registration are just a few of the outstanding features that make the Lynch Robo-Wrap a profitable investment for all industries using flexible unit packaging. Write, wire or phone for complete information!



LYNCH-ROBO CORPORATION
A SUBSIDIARY OF

LYNCH
CORPORATION

ANDERSON, INDIANA

Branches — New York • Toledo • Chicago
San Francisco • Los Angeles • Atlanta • Dallas
Export Dept.: Anderson, Indiana Cables: Lynchnoboy

y


d
with

obo-

ted,

oy

ONER



For the
ackaging
print
anywhere
hal
in desi
sales
our Mil



For the widest variety of
packaging materials and
printing processes available
anywhere, plus more than
half a century of experience
in designing and producing
saleswinning packages, call
your Milprint man — FIRST!



In Foil

- Added Protection
- Added Sparkle

Eye Appeal to Spark Impulse Sales!

ROTOGRAVURE

BEAUTIFUL CARTON OVERWRAPS

BY **Milprint**



In Cellophane

- Protection
- Beauty*

Printed Cellophane, Pliofilm, Polyethylene, Saran,
Acetate, Glassine, Foils, Folding Cartons, Bags, Mylar,
Lithographed Displays, Printed Promotional Material

*Reverse printed sheen

This insert printed by Milprint, Inc.

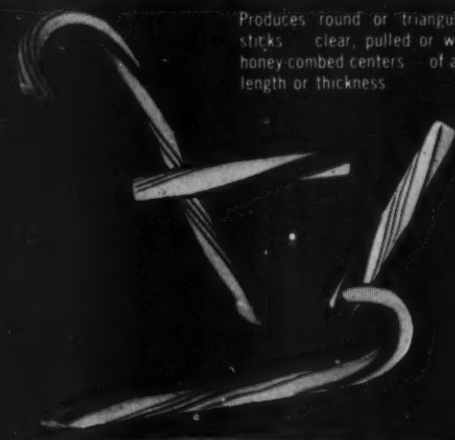
*Reg. U. S. Pat. Off.

Milprint ^{*} INC
PACKAGING MATERIALS
LITHOGRAPHY & PRINTING

General Offices, Milwaukee, Wisconsin
Sales Offices in Principal Cities



Produces round or triangular sticks — clear, pulled or with honey combed centers — of any length or thickness



the Racine Stick Candy Machine

automatically, continuously sizes, twists and cuts sticks of any diameter and length

produces up to 1,200 inches a minute

A single operator can produce up to 1,200 inches of stick candy a minute with the Racine Stick Candy Machine.

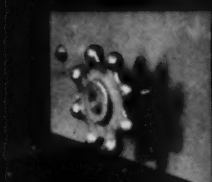
For three-inch sticks, this means as much as 400 a minute . . .

24,000 an hour. Just divide 1,200 by the length of stick you want

to make to find out your maximum production.

And, the operator needn't be skilled or experienced to attain this high speed production. All the operator does is feed the machine from a batch roller or flat board. The sizing, twisting and cutting are automatic and continuous.

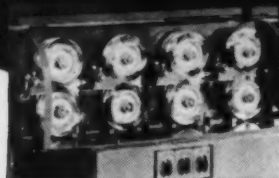
The Racine Stick Candy Machine means increased production and lower costs for you. Get the complete details today — the coupon is for your convenience.



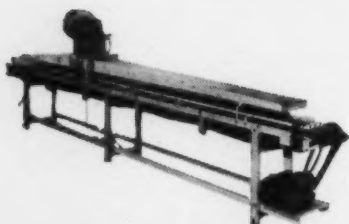
Single handwheel adjustment sets speed to your production needs — even while the machine is in operation



Length of stick is easily varied by adjusting the twister conveyor carrying belt



Diameter of stick is easily adjusted by interchanging the equalizing rolls.



Cooling Conveyor

Keeps sticks straight and round while cooling.

VACUUM **V** **R** **RACINE**
CANDY MACHINERY CO. CONFECTIONERS' MACHINERY CO.

15 PARK ROW, NEW YORK 38, N. Y.

Western Office and Factory: Racine, Wis. • Eastern Factory: Harrison, N. J.

Please send me full details on how we can produce up to 1,200 inches of stick candy a minute with the Racine Stick Candy Machine.

Name

Company

Address

City Zone State

C
achi
past
redu
In
fecti
1955
crea
affec
from
in p
whe
indu
wha
work
able
wage
Th
The
Mar
they
and
peop
is di
can
Sa
ment
Geor
stand
leisu
"MO
Th
to hi
we g

for J

Systematic Cost Reduction

by EDWARD A. TERRY, *Wallace & Company*

Cost reduction is everyone's goal. Some of us achieve it systematically year in and year out. Over the past few years, dozens of candy companies did not reduce their costs, and they are no longer with us.

In January 1956, the hourly labor rates in the confectionery industry were 5% higher than in January 1955. On March 1, 1956, the minimum wage was increased from 75¢ to \$1.00 per hour. This may not have affected many candy companies directly, but 6 months from now many things everyone buys will be higher in price, especially goods manufactured in the South, where the 75¢ minimum was quite prevalent in many industries such as textiles, paper, etc. Wait and see what a pair of socks will cost you and the people who work in your plant 6 months from now. It is reasonable to foresee higher living costs and pressures for wage increases.

There will also be considerable indirect pressures. The people who were getting a dollar per hour before March 1st will want to maintain the 25¢ differential they formerly enjoyed over the 75¢ per hour people, and they will now want \$1.25. The \$1.25 per hour people will want \$1.50, and so on all the way up. It is difficult to see how spiraling wage rates and costs can be avoided.

Sam Gompers once was asked what the labor movement wanted. He answered in one word — "MORE". George Meany now says, "We seek an ever rising standard of living — not only more money, but more leisure, and a richer cultural life. The answer remains, "MORE".

The man in charge of a candy plant claps his hand to his forehead and says, "MORE"? What more can we give them? Here's what we're giving them now!!

From 1 to 4 weeks vacation, depending on length of service.

10 paid holidays per year.

Free uniforms and laundry service.

Group Life Insurance, paid up on retirement.

Health Insurance.

Free Ambulance Service for the worker and his family.

Free Pensions with no contributions by the worker.

How can we give "MORE"?

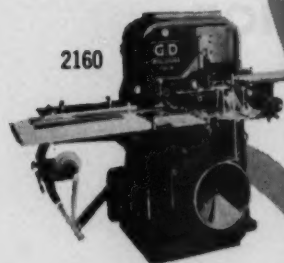
The extra benefits mentioned above are already in effect in one or more candy companies even though they are not in the list of ingredients on the main surface of the candy package.

Let us all realize that the pressures for MORE will not cease, they will increase. The pressure on management for Cost Reduction, is therefore greater than ever. We can get frightened and panicky, or face the future with calm intelligence and make use of some of the tools of scientific management to help reduce our costs.

First, we all should give more attention to figuring our standard costs, and revise them more often in line with changes in raw and package material prices, labor costs and departmental overhead rates. Insufficient and inaccurate standard cost data pushed many a company down the greased slide to oblivion. But standard costs are not enough, we must have accurate, comprehensive figures on our actual costs.

In our plant we have set up a system of Cost Controls for Labor, which give us *actual* labor costs each week. For example, we have separate labor cost per unit for cooking, casting, enrobing, crystallizing, cellophane wrapping, shipping, receiving, material stock, refrigeration and about 20 other separate departments.

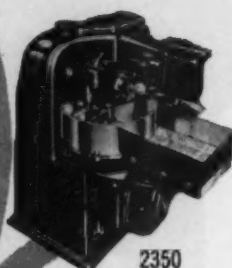
Each Monday morning at 10 A.M. we have a meet-



2160

If you wrap candy, you can do it faster and better on a

SUPERMATIC G. D.

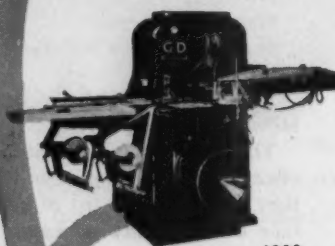


2350

Hard or soft forms; regular or irregular shapes; see the SUPERMATIC G.D.



2100



4000

See us at the NCA show, Booths 23, 24, 25, 26, or see our permanent exhibit in our showrooms.

SUPERMATIC PACKAGING CORP.

132 Pacific Street, Newark 5, N. J.

ing. At this meeting, we have the President, the Vice President in Charge of Production, the Treasurer, the Plant Superintendent and his assistants, the head of the Planning Department and the Plant Engineer. The actual labor cost figures are put on the blackboard in cost per unit, cumulatively, from January 1st to the date of the meeting. We also show in an adjoining column, the cumulative cost per lb. for the same period in the previous year. The difference between the two multiplied by the production so far this year, is the loss or gain in dollars for that department. The departments are grouped to show the total results for each supervisor. (Example on blackboard.)

With this system we don't have to wait for the monthly or quarterly Profit and Loss Statement to wake us up to the fact that something had gone wrong, and that it is now too late to do anything about it. We want comprehensive, accurate figures on every phase of factory operation and we want them quick, while we can still do something about them. Therefore, I repeat, our meeting to discuss the previous week's results is on *Monday* morning, when we have a whole week to do something about a situation that needs correcting. If we had the meeting on Friday, some of us would have the whole week-end to forget about it, instead of doing something about it.

This whole procedure takes less than 40 minutes, once a week, and is the only regular formal meeting we have. This system works for us because:

1. We know quickly the situations that need correction.
2. We can take immediate action because all persons in authority can consider the situation, and make the necessary decisions for remedial action, quickly, without wasting time or dollars through procrastination.
3. We spend very little time in meetings.

Simplifying further:

1. We know when something starts going wrong.
2. We can stop it before it goes very far.

This system of actual cost controls, adapted to your particular conditions, is highly recommended. You have good willing supervisors, foremen, foreladies, assistant superintendents and superintendents in your plants, perhaps better than you realize. Give them the facts and they will do the job for you. But give them the information quickly when they can still do something about it, not three months later when no one even remembers what happened. If you have one or two weak supervisors, these weekly figures will show up their shortcomings and you can take remedial action. Our experience has been, that most of these supervisors will take action without any hectic prodding from Management, on their own initiative, once you give them the facts. It's always a source of great pleasure to see the proud looks on the faces of those supervisors whose figures show an improvement from week to week.

On a previous occasion, at one of these Production Conferences, it was my privilege to discuss at some length, the use of incentives in a candy plant. Therefore, only a brief reference will be made today to that subject. However, let us remember that the best incentive plans are based on time studies, because

that is the best way to determine what a fair day's work is. We think of 60 minutes work per hour as being normal. If an 80 minute job is done in 60 minutes, we pay our people for the extra 20 minutes. Our experience over many years has shown that, without incentives, we get 45 minutes of work per hour, and with incentives we average better than 80 minutes of work per hour. These incentives result in big paychecks for the people who do the work, but also result in lower unit costs for the company. After all, that is the secret for a high standard of living — big paychecks and low unit costs.

Another asset in the struggle for Cost Reduction is Production Control. Since we make a multiplicity of items, it is necessary for us to have a Planning Department, whose function it is to accurately control our production and inventories with major emphasis on shelf-life. Through a complex system evolved over many years, we have, so far, been able to forecast our holiday sales with better than 95% accuracy. It is not necessary for me to point out the tremendous savings made possible by having no carry-overs of holiday goods.

The Planning Department has also helped us to level out our production peaks, so that we have come mighty close to year round employment for our people, and consequent lower unit costs for the company.

Another possible place to reduce costs is in our offices. We have recently discontinued the practice of sending out monthly statements as being unnecessary. Only 1/3 of 1% of our customers objected.

I do not believe in Cost Reduction through the use of cheaper materials in our candy. Perhaps the reason that per capita consumption of candy is not increasing, is because too much poor candy, poorly made from inferior materials, is on the market today.

You can get Cost Reduction with increased volume to kill overhead. If your gross margin of profit is really high enough, you don't have to sell candy, you can afford to buy customers through lavish and extensive advertising like the lipstick makers do with "The \$64,000 Question". According to Fortune Magazine that's how Revlon increased their volume 54% and their net profit 200%. If you can afford to pay \$70,000 per week and think you're smart enough, and lucky enough, to pick a Television program as good, or better, than "The \$64,000 Question", then that may be your answer to cost reduction.

Cost Reduction can be achieved by Automation.

Automation. That's a wonderful word. It was coined before anyone had made up a definition for it. Thousands of management men have sat in countless meetings trying to find out what it meant, and came out of the meetings more confused than when they went in.

Certain groups are against automation because they think it will put people out of work. On the other hand, one plant manager is very enthusiastic for automation because he thinks he will be able to go to his office in the morning, push a button to start the factory, push another button at night and he will get a full day's production without paying wages or salaries to anybody except himself. Last year, at a candy-men's meeting, the speaker on automation was successful in leaving me bothered and bewildered.

See the machines that created a sensation at the Milan (Italy) Fair last month (to be shown in this country for the first time)

2160 S

If you wrap candy, you can do it faster and better on a **SUPERMATIC G. D.**

2650

Hard or soft forms; regular or irregular shapes; see the **SUPERMATIC G.D.**

2350 Super

2500

See us at the NCA show, Booths 23, 24, 25, 26, or see our permanent exhibit in our showrooms.

SUPERMATIC PACKAGING CORP.

132 Pacific Street, Newark 5, N. J.

Perhaps we ought to try to pierce the veil of confusion about automation, as it applies to the candy plant.

The word automation received tremendous publicity since 1947, when the Ford Motor Company used it to describe a new method of transferring automobile parts from one machine to another so that a series of operations was performed automatically. There have been so many new things happening in all industries including our own; so many revolutionary advances in industrial technology that the word automation is applied to all of them. Automation is even used to describe the machine that sets up the pins in a bowling alley.

Mechanization started with the Industrial Revolution, 200 years ago. Man's muscles were replaced by machinery. Man's ability to handle information is being replaced by automation. Automation is capable of handling information received from photo-electric cells, gauges and other measuring devices and acting upon this information to control and adjust some other machine. The thermostat used to control the heat in your home is automation in principle.

The more advanced concept of automation is a complex arrangement of electro-mechanical switches, vacuum tubes, solid-state, semi-conductor crystals and ferro-magnetic cores. The most important features of present day automation are sensitive electronic components. In the next 10 years the science of electronics will advance more than it has in the past 75 years, according to Gen. Sarnoff of R.C.A.

These days, when something is theoretically possible, it soon gets actually done. It is theoretically possible to take a candy formula, transfer it to punched cards or magnetic tape, feed it into an automation system which will electronically weigh out the ingredients, start a cooker or a mixer, shut off the steam at a certain temperature and your candy batch is finished, or you can make it run continuously. To change the formula you insert another punched card in the system.

Some of the terminology used is new and strange. An "analogue computer" is a type of computing machine that operates with numbers which represent figures on direct measuring devices such as voltmeters, pressure gauges, temperature gauges etc. You might call it a mechanized slide rule.

A "servo-mechanism" takes a comparatively feeble impulse from an automatic device such as the photo-electric cell or from a meter used to measure speed, temperature, voltage and so forth. This is the primary control. Usually an electric motor, or other power driver mechanism, augments the primary control as it responds to the variations in the feeble impulses in the primary control, so that it is used as a correctional or compensating device.

Still another aspect of automation is "feed-back". This applies to a system where instruments measure or analyze the end product and automatically make adjustments in the controls. For example in a mogul operation we want a certain weight of candy deposited in each board. Any variation from the desired tolerances would be automatically fed back to the machine and adjustments made to the sizing wheel. This

is also known as the "closed loop". This is another example of handling information mechanically.

We have used electronic temperature controls in cooking certain kinds of candy for over 4 years and have been entirely successful in maintaining our high standards of quality. We can dial whatever temperature we want, and get it within 1/10 of a degree.

The human problems caused by applied science are serious, but if we remember that they are human problems, and remember to treat people like human beings, they can be solved.

Why not let the candy maker see particles of the candy he has made under your microscope? Let him look at his candy in the refractometer to see what his moisture content is. The practical man knows things you don't know, and you don't know things the practical man knows. If you will let him in on some of your technical know-how, he will let you in on some of his practical know-how. Much of the difficulty lies in the attitude of the technical man, the chemist and the engineer in not even making an effort to woo the ideas of the practical man. After an extended courtship, it may be possible to arrange a wedding between Art and Science, without a shotgun.

Such a wedding may result in the clearing up of scientific mis-information prevalent to some extent in the candy industry.

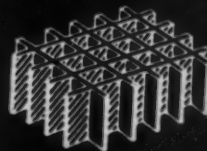
The plants that arrange a wedding between Art and Science will be ready to live happily forever after with Automation, and the marriage will be blessed with many beautiful Cost Reductions.

MURNANE

"Lint Free"

PAPERBOARD PRODUCTS

Base Cards, Boats, Trays, Dividers, etc.
for use in automatic wrapping machines.



also

LINT FREE PREASSEMBLED NEST PARTITIONS, DIVIDERS
AND LAYER CARDS. "H. T. NON-STICK" TREATED
CARDS AND BOATS FOR STICKY BARS

MURNANE PAPER COMPANY

1510 N. KOSTNER AVE., CHICAGO 51, ILL.
WRITE OR CALL COLLECT CAPITOL 7-3300

New Packages



Necco is now using multi-color rotogravure cellophane overwraps in place of window cartons, for three of their chocolate covered items. Besides providing a more attractive package, these new overwraps and closed cartons provide more protection for the candy.

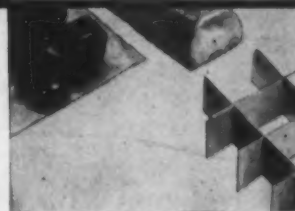


The Wise potato chip bags have been re-designed after 15 years of the original design. The bags are printed in 3 colors on cellophane. A new addition to the line is the two-sum bag, with two individual unprinted bags enclosed in a large printed bag.

X-ray photo of actual box of candy



GLASSINE PAPER



The inside story on Protective Candy Packaging

Chocolate presents a tricky inside packaging problem. It has a high fat content which will stain and seep through ordinary papers. This will not occur, however, when layer pads, cups, and dividers are made of glassine. The inherent density of this Rhinelander paper is the reason.

Many candy bar wraps are made of Rhinelander glassine. Its glossy, rich appearance and

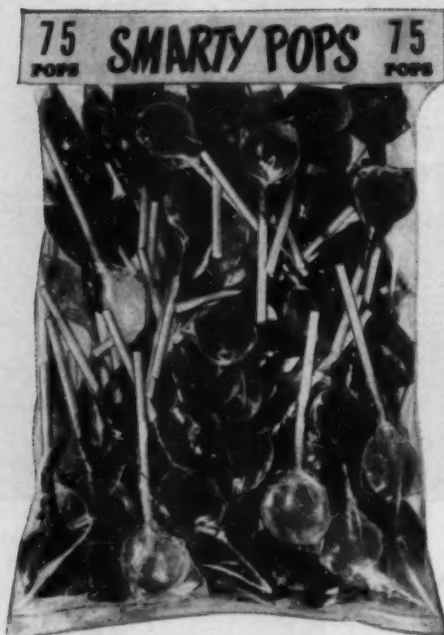
smooth surface provide for excellent printing. Handles easily and economically on automatic packaging equipment. For added eye appeal, glassine is available in a wide variety of colors and in embossed, opaque, and translucent grades. Versatile glassine paper can fit your specific protective packaging requirement economically. Write for samples, stating application.



RHINELANDER PAPER

Rhineland Paper Company, Rhinelander, Wisconsin

VISQUEEN[®] film



Best way yet to put taste-appeal into candy packaging! Makes all candy look better ... sell faster. Even more important, bags of tough, sparkling VISQUEEN film keep candy fresh longer. Only natural that smart candy packagers everywhere are turning to bags made of VISQUEEN film for greater sales ... increased profits.

6 reasons why VISQUEEN means better packaging at lower cost to you!

Superior strength to eliminate package breakage. Matchless uniformity for better machineability. Unexcelled ink adhesion for better printing. Economy to reduce packaging costs as much as 50%. Stiffness and body for faster filling and closing. Years of experience in producing a superior quality packaging film.

A converter of VISQUEEN film will help you get better, more economical packaging. For names, clip coupon, attach to letterhead and mail.

Important! VISQUEEN film is all polyethylene, but not all polyethylene is VISQUEEN. Only VISQUEEN has the benefit of research and resources of

THE VISKING CORPORATION

World's largest producers of polyethylene sheeting and tubing.

IN CANADA: VISKING LTD., LINDSAY, ONTARIO • IN ENGLAND: BRITISH VISQUEEN LTD., STEVENAGE

VisQueen[®] film ...
a product of
THE VISKING CORPORATION
Box MC6-1410
Plastics Division, Terre Haute, Ind.

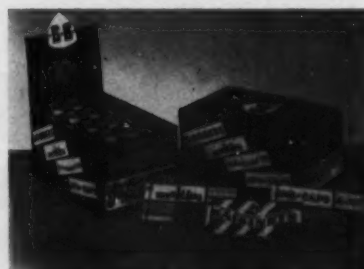
Name _____
Title _____
Products _____

New Packages

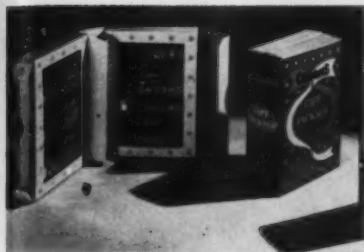


Phoenix Candy Company is using a printed saran bag of single wound 100-gauge film for their English Style Toffee. The bag is printed in three colors by rotogravure. It is claimed that the use of single wound saran of 100-gauge provides a distinctive cost saving over the use of double wound 100-gauge film.

Packaged by Printon Corporation.



A new unique 24-count carton that is interchangeable for four different pocket packages is being used by Blumenthal Bros. Chocolate Company. All four items are illustrated on the sides of the package, and a window in the front identifies the particular item in that carton. The top of the carton is die cut and creased to form a display at the back of the carton. The interchangeable nature of the carton enables the company to stock only one carton instead of four for this group of products, and yet it gives positive identification of the particular item packed in it.



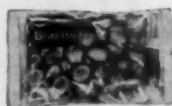
Charms Company is packaging its Charms hard candy in a new family of gift book cartons. The carton opens to reveal two acetate windows, each one displaying six assorted packs of Charms. Printed in three colors on white board, it makes an unusually attractive gift package for hard candy.



Milko Candy Company is packing five 2-ounce saran bags of "Caranuts" in a window carton that is priced to sell for approximately 49 cents retail. The saran bags give this highly perishable product a surprisingly long shelf-life.



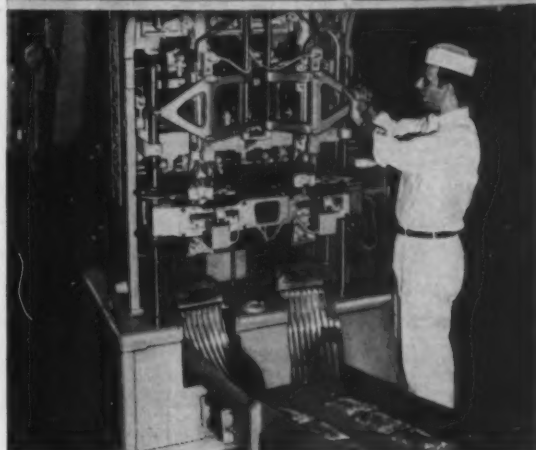
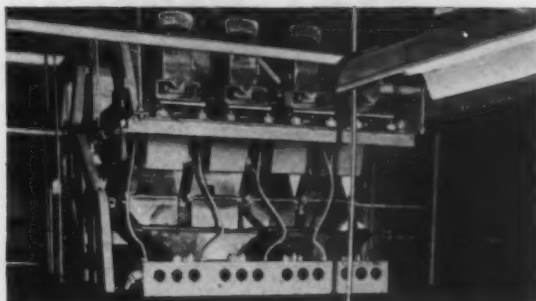
Goldenberg Candy Company has substituted a lithographed carton for a cellophane overwrapped tray, with very good results. It is claimed that the package eliminated breakage and pilferage, improved retail display both in structure and appearance, and retained the brand identity over a longer period of time after opening.



One of the many
COMPAK machines
at E. J. Brach & Sons

- Forms the Package from the Roll Stock
- Fills the Package to weighed measure
- Hermetically seals with Straight Cutoff
- Closely Registers the Printed Design

use
COMPAK
for
**COMPLETE
PACKAGING**



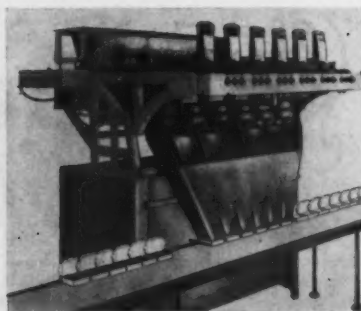
E. J. Brach & Sons have realized packaging economy with sales appeal and product protection on their Hayssen COMPAK machines.

The Hayssen COMPAK can do the same for you. Let our experienced packaging engineers help you with your packaging problems. **WRITE US TODAY!**



HAYSSEN COMPANY
Department MC-6 • Sheboygan, Wisconsin
first in Automatic Packaging Since 1910
Atlanta • Boston • Chicago • Dallas • Denver • Detroit • Los Angeles • Minneapolis
New York • Philadelphia • St. Louis • San Francisco • Seattle • Montreal • Toronto

New Products



A full line of automatic net weight scale units has been added to a line

of packaging machinery. They are available in units of 2 to 6 scales, for a wide range of production requirements. Unusually high accuracy is obtained through a triple vibrator feed that gives the most even distribution of products from feed to scale. Both bulk feed and dribble feed are used. Settings on the Poise are graduated in $\frac{1}{64}$ ounce increments. Therefore, scales provide tolerances to $\frac{1}{64}$ ounce in small products and to one piece plus in larger items.

For further information write Haysen Manufacturing Company, Sheboygan, Wisconsin.

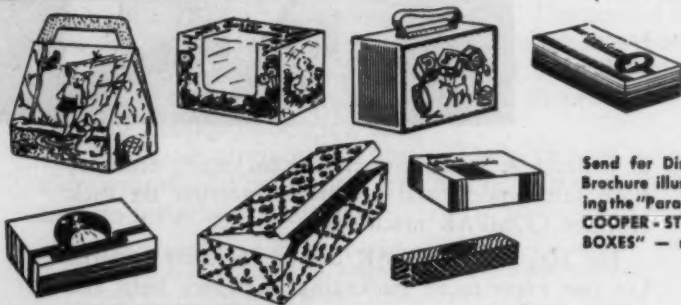
THE WAY DEALERS TELL IT



Start Making More Candy Sales -- Year 'Round!

National Advertising is teaching people that Good Candy is Good for them.

Successful dealers have proved that Cooper-Styled Folding Boxes bring customers back for repeat orders.



Send for Display Brochure illustrating the "Parade of COOPER-Styled BOXES" — now!

COOPER PAPER BOX CORP. BUFFALO 4, N. Y. DEPT. M

Cooper Paper Box Corporation, Dept. M
Buffalo 4, New York.

Please send us Display Brochure of Cooper-styled Boxes with prices.

Our firm name
Street
City Zone State



A new fiber glass tray has been developed for use in handling or storing candy. Harder than steel on a strength-weight basis, the tray will not bend, dent, warp or splinter. A smooth, non-porous surface and rounded corners make cleaning easier and virtually eliminates maintenance. Available in a variety of attractive colors, the tray measures $11\frac{3}{4}$ by $18\frac{1}{2}$ inches.

For further information write Molded Fiber Glass Tray Company, Linesville, Pa.



A polyethylene Easter candy bag that could be converted to a stuffed animal toy after emptying was used this year by the Zion Candy Company. The design with instructions was printed on the back. To make the toy, the consumer simply cut out the rabbit design, stuffed it and sewed it up.

For further information write The Visking Corporation, Plastics Division, Terre Haute, Indiana.

are
s, for
quire-
is ob-
feed
ution
Both
used.
uated
efore,
ounce
piece

Hays-
She-

n de-
stor-
on a
will
er. A
and
easier
ance.
active
18%

Mold-
Lines-

y bag
stuffed
used
empa-
s was
e the
at the
ewed

The
vision,

ONER



This one really moves . . . it looks better in Saran Wrap



When extra protec-
tion is important,
shoppers look for
this hallmark.

Candies have to *stand out to sell out* in today's competi-
tive market. That's why more and more leading brands
are appearing in sparkling Saran Wrap®, the packaging
that adds the eye-appeal . . . the look of freshness
shoppers can't resist. It has taken candies to new
sales highs!

Saran Wrap is the completely transparent plastic film
that puts candies on display at their best. It's soft,
pliable and tough enough to keep packages in shape
even on self-service counters. Saran Wrap is moisture-

proof . . . so candies retain all their freshness and flavor.
It adds the look that wins impulse sales and the protec-
tion that assures repeat sales.

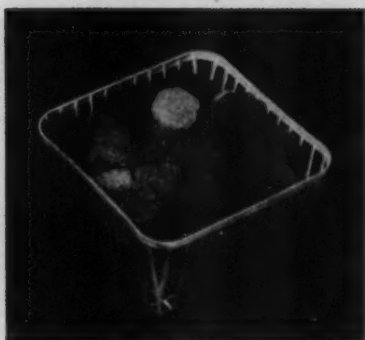
Time to give your products a sales lift? Then send them
to market in Saran Wrap. And be sure to add the Saran
Wrap hallmark of protection to your packages. It's the
name millions of homemakers know as the finest in food
protection. Dow packaging service is ready to help you†.
THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics
Sales Dept. PL607C.

®Trademark of The Dow Chemical Company

†Write today for the brochure on packaging with Saran Wrap bags.

you can depend on DOW PLASTICS





A new plastic basket for packag-

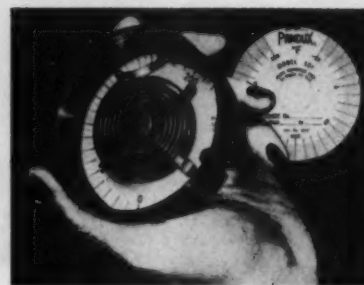
ing has been developed, which combines the value of maximum product visibility with good protection of content. It is a rigid plastic basket container which comes in a wide range of colors, shapes, sizes and designs. It has a built-in premium value for re-use. It is easily adapted to automatic filling machinery and to cellophane overwrapping equipment. It is claimed that they are competitive in price with folding cartons.

For further information write Gilbert Plastics, Inc., 1415 Chestnut Avenue, Hillside 5, New Jersey.



A heavy duty pressure-sensitive Teflon tape has been developed as a heavy duty non-stick facing for use on packaging machinery. This tape is .013" and is available in rolls from 1/4" to 12" in width. It is particularly useful on the heat sealing sections of packaging machinery, as well as other equipment where a non-contaminating, non-sticking and heat-stable material is desirable.

For further information write The Connecticut Hard Rubber Company, 407 East Street, New Haven 9, Connecticut.



A new low cost recording maximum-minimum thermometer has been developed. This instrument measures the temperature and records both the lowest and highest values over any given period of time. It has a replaceable paper chart on which the temperature extremes are recorded. The chart can be quickly replaced and filed.

This thermometer comes in two ranges—minus 50°F to 250°F or minus 50°C to 100°C. It has particular value in determining extreme temperatures encountered during shipment of candies in public carriers to distant places. These thermometers are priced at \$19.50 each.

For further information, write the Pacific Transducer Corporation, 11836 West Pico Boulevard, Los Angeles 64, California.

WE CAN HELP YOU "PRODUCTIONWISE"

Are you planning production of summer candies?

Are your current formulas in balance?

Do your candies prematurely grain?—

dry, ferment or mold?

Can your process be simplified, and your

costs lowered?

Can you improve quality and maintain uniformity?

NULOMOLINE SERVICE . . . cooperating
with manufacturers since 1909
. . . can be of service to you.

• • • • •

Discuss your problems with
our practical-technical staff



Don't fail to visit Booth No. 90
at the forthcoming
CONFECTIONERY INDUSTRIES EXPOSITION
Mechanics Hall, Boston, Mass.
June 11-14, inclusive

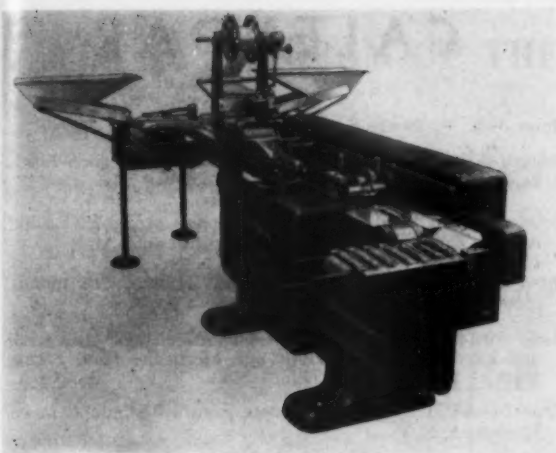
THE NULOMOLINE DIVISION AMERICAN MOLASSES COMPANY

Manufacturers of Nulomoline® (Standardized Invert Sugar) and Syrups

120 WALL STREET, NEW YORK 5, N.Y.

330 East N. Water St., Chicago 11, Ill. 1300 W. 3rd St., Los Angeles 17, Calif.

NULOMOLINE, LIMITED: 1461 Parthenais St., Montreal, Canada



Irregular shaped candy products may be wrapped either in-line or separately.

The candies are placed in front of chain flights by shuttle or hopper feeds on an extended receiving conveyor. This conveyor automatically places them into a tube which has been shaped and formed from the packaging material parent feed roll. An escape device permits a pre-determined number of multiple unit products such as pops, balls or patties to proceed through the packaging operation in group formation within the material formed tube.

Unless the candy requires more rigid support for subsequent handling, no stiffeners or trays are required. When such materials are used, automatic operation feeds cardboard stock direct from rolls, cuts it to size and positions it in conveyor.

In-line installations of the wrapper permit continuous operation direct from coaters, enrobers and hardeners so that candy flavor and freshness is immediately protected and sealed in by any sealing processes required. This is especially advantageous in the production of seasonal and holiday novelties.

For further information write: Hudson Sharp Machine Company, Green Bay, Wisconsin.

PMCA new officers elected at the last annual meeting are: President—Clarence G. Bortzfield, Keppel's, Inc.; 1st Vice President—Richard M. Stark, Bachman Chocolate Mfg. Co.; 2nd Vice President—E. W. Meyers, Hershey Chocolate Corp.; 3rd Vice President—Clayton A. Minter Jr., Minter Bros.; Treasurer—Robert F. Keppel, Keppel's, Inc.; Secretary—Harry H. Rohrer; Executive Committee—I. Harry Goldenberg, Otto J. Glaser, Charles S. Grube, David Sykes, Mark J. Heidelberger, Anthony J. Napolitan, Ben Grosscup.



Bortzfield

QUALITY MERCHANDISE SHOULD HAVE QUALITY PACKAGING

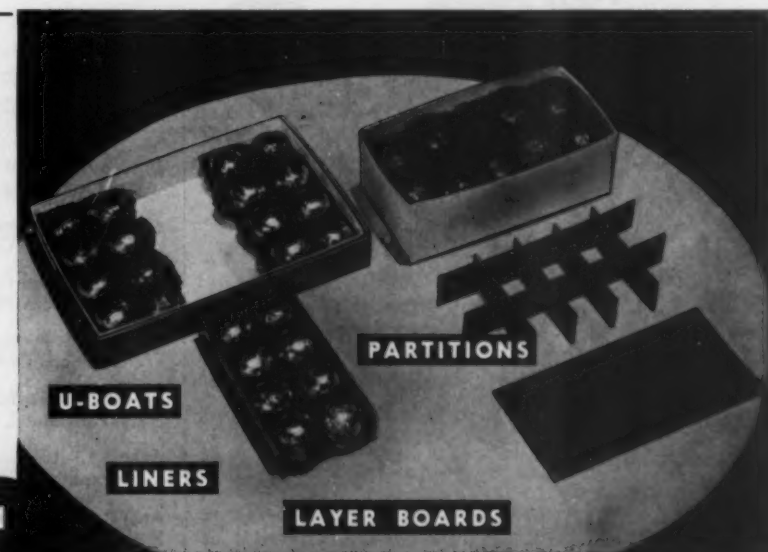
TRAVER PARTITION CORPORATION

404 N. Sacramento Blvd. KEdzie 3-0724
CHICAGO 12, ILL.

Bound Brook, N. J. Chimney Rock Rd.
ELiot 6-3165

Los Angeles, Calif. 9118 Sunset Blvd.
BRadshaw 2-7804

San Francisco, Calif. 2400 Buchanan
JOrden 7-8224



IN PARTITIONS as in all your packaging, make sure they complement the quality of your product in every detail.

Traver offers a complete line of internal packaging, in all grades of board and all colors, with prompt delivery in any quantity.

LINT-FREE • GREASE-RESISTANT • ODORLESS
ECONOMICAL





...IN STEP PACKAGING

WRAP-KING CORP.
SUBSIDIARY OF CROMPTON & KNOWLES
HOLYOKE • MASS.

CALENDAR

- June 8—L. A. Confectionery Sales Club Cocktail Party.
- June 9—Carolina Confectionery Salesmen's Club, noon luncheon at Honey's Restaurant, Charlotte, N. C.
- June 10-13—Associated Retail Confectioners of the U. S., 36th Annual Convention, Somerset Hotel, Boston, Mass.
- June 10-14—The Institute of Food Technologists annual meeting, Hotel Jefferson, St. Louis, Mo.
- June 10-14—National Confectioner's Association Convention and Exposition, Statler Hotel and Mechanics Hall, Boston, Mass.
- June 14—AACT, New York Section, Busto's Restaurant, Lower Manhattan, N. Y.
- June 14—Metropolitan Candy Brokers Assn. Inc., Hotel Empire, 63rd St. and Broadway, New York City, N. Y.
- June 18—Confectionery Salesmen's Club of Philadelphia, 1:30 PM, 2601 Parkway House, Philadelphia, Pa.
- June 19—Candy Executives & Allied Industry Club, St. George Hotel, Brooklyn, N. Y.
- June 21—New York Candy Club, Park Sheraton Hotel, Manhattan, N. Y.
- June 28-July 1—Boston Confectionery Salesmen's Club Convention, Mayflower Hotel, Cape Cod, On the Ocean at Manomet Point, Mass.
- June 29—Chicago Candy Club Golf Outing, River Forest Country Club.
- June 30—Southwestern Candy Salesman's Assn., B&B Cafe, 3520 Oak Lawn Avenue, Dallas, Texas.
- June 30—Dallas Candy Club, luncheon 12:30 noon, B&B Cafe, 3520 Oak Lawn Avenue, Dallas, Texas.
- July 7—Kansas City Candy Club, The Town House, Kansas City, Kansas.
- July 7—Northwest Candy Club, Seattle, Wash., contact secretary for meeting place.
- July 10-12—Western Packaging & Materials Handling Show, Los Angeles, California
- July 11—Annual Convention, Southern Salesmen's Candy Club, Dinkler-Plaza Hotel, Atlanta, Ga.
- July 12-14—Southern Wholesale Confectioners Assn. annual convention, Dinkler-Plaza Hotel, Atlanta, Ga.
- July 29-August 1—NCWA Convention and Exposition, Sheraton-Park Hotel, Washington, D. C.
- August 13—Chicago Production Club open golf tournament for the candy industry, at Elmhurst Country Club, Elmhurst, Ill.
- August 26-30—Boston Candy Show, Hotel Statler, Boston, Mass.
- September 10-12—Packaging Institute Forum, Hotel Statler, Cleveland, Ohio
- September 11-14—Packaging Machinery and Materials Exposition, Cleveland Public Auditorium, Cleveland, Ohio.
- September 20-22—Michigan Tobacco and Candy Distributors Assn., Annual meeting, Hotel Statler, Detroit, Michigan.
- September 25—Candy Executives Club Shore Dinner, St. George Hotel, Brooklyn, N. Y.
- November 6-8—Canadian National Packaging Exposition, CNE Automotive Bldg., Toronto, Canada.

PROGRAM OF THE ANNUAL CONVENTION

National Confectioners Association

June 11th through 14, 1956

Mechanics Hall, Boston, Massachusetts

Monday, June 11—Joint N.C.A.—A.A.C.T. Session at M.I.T.

9:00-9:30 Mr. A. L. Brody, M.I.T., Cambridge, Mass.
"Application of Electronic Techniques to Candy Evaluation and Control"

9:30-10:00 Mr. Russell J. Ramsey, Ramsey Laboratories, Cleveland, Ohio.
"Milk Products in Candy"

10:00-10:30 Dr. Henry Hass, President, Sugar Research Foundation, New York, N. Y.
"Recent Developments in Sugar Products"

10:30-10:45 Recess

10:45-11:15 Mr. H. N. Bosschieter, Crock & Laan, Wormerveer, Holland.
"New Technical Developments in Fats"

11:15-12:15 Dr. A. G. Lipscomb, Chief Chemist, John Mackintosh & Sons, Halifax, England
"Impact of Science on the Confectionery Industry During Thirty Years"

12:15-1:00 Inspection of Dorrance Food Laboratories, M.I.T.

1:00 Joint Luncheon, Campus Room, M.I.T.
Annual Meeting, A.A.C.T.

2:00-8:00 Exposition, Mechanics Hall

Tuesday, June 12—Hotel Statler

8:00-9:00 Early Bird Breakfast

9:00-9:15 Mr. Philip P. Gott, President, N.C.A.
Official Opening of 1956 Convention

9:15-9:45 Mr. Ray M. Schmitz, Vice President, Operations, General Foods Corp., New York, N. Y.
"What's Ahead in Food Technology"

9:45-10:00 Recess

10:00-10:30 Charles Bliss, Professor Business Administration, Harvard Business School.
"Thinking Ahead About Business Trends"

10:30-11:00 Mr. Robert Cutler, Chairman, Old Colony Trust Company, Boston, Mass.
Consultant, National Security Council
"National Affairs"

Adjourn to Boston Candy Manufacturers' Reception, Mechanics Hall

12:30-Opening Luncheon, Mechanics Hall

Speakers: The Honorable Robert C. Hill, Assistant Secretary of State
The Honorable Christian A. Herter, Governor of Massachusetts

2:00-8:00 Exposition, Mechanics Hall

Wednesday, June 13—Hotel Statler

8:45-9:15 Movie: "People, Products and Progress"

9:15-10:00 Mr. Donald J. White, Associate Dean, College of Business Administration, Boston College
"What Makes Good Labor Relations?"

10:00-10:15 Recess

10:15-10:45 Dr. C. R. De Carlo, Director of Applied Science, International Business Machines Corp., New York, N. Y.
"Automation in the Office"

10:45-11:30 Panel: Moderator, Harry R. Chapman, Chairman, N.C.A., Washington Committee
"Washington Reports and Forecasts"

11:30-12:00 (Speaker to be announced)

12:00-8 PM Exposition, Mechanics Hall

8 PM Production Forum—Paul Revere Hall, Mechanics Building
Moderator, James A. King—10 Panel Participants to be announced.

Thursday, June 14—Hotel Statler

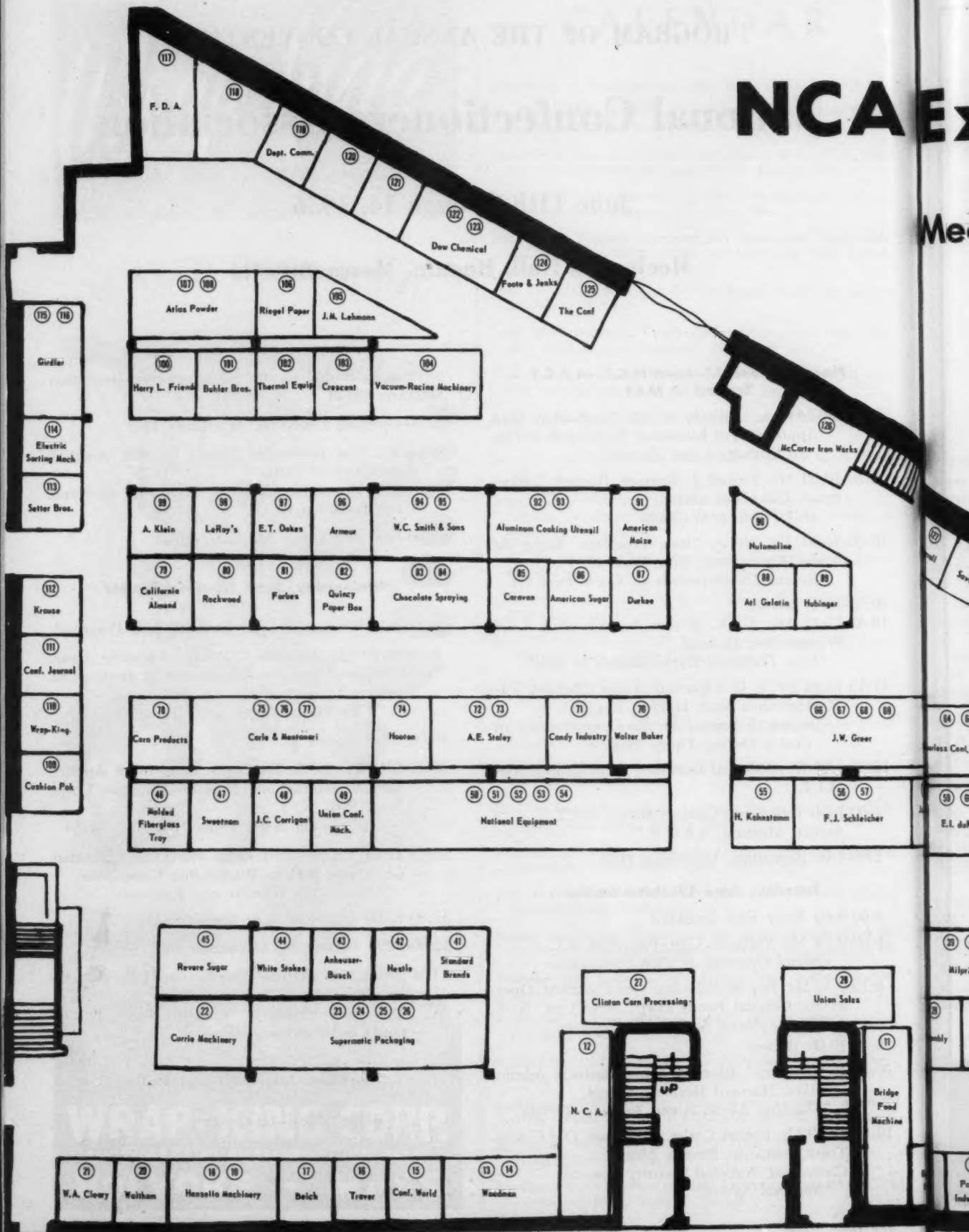
Thinking Ahead—Candiedly

Advanced Techniques for Increased Sales . . .

• Distribution • Merchandising • Marketing
• Public Relations

12:00-5:00 Exposition, Mechanics Hall

NCA EX



A Exposition Guide

Mechanics Hall, Boston, Mass.

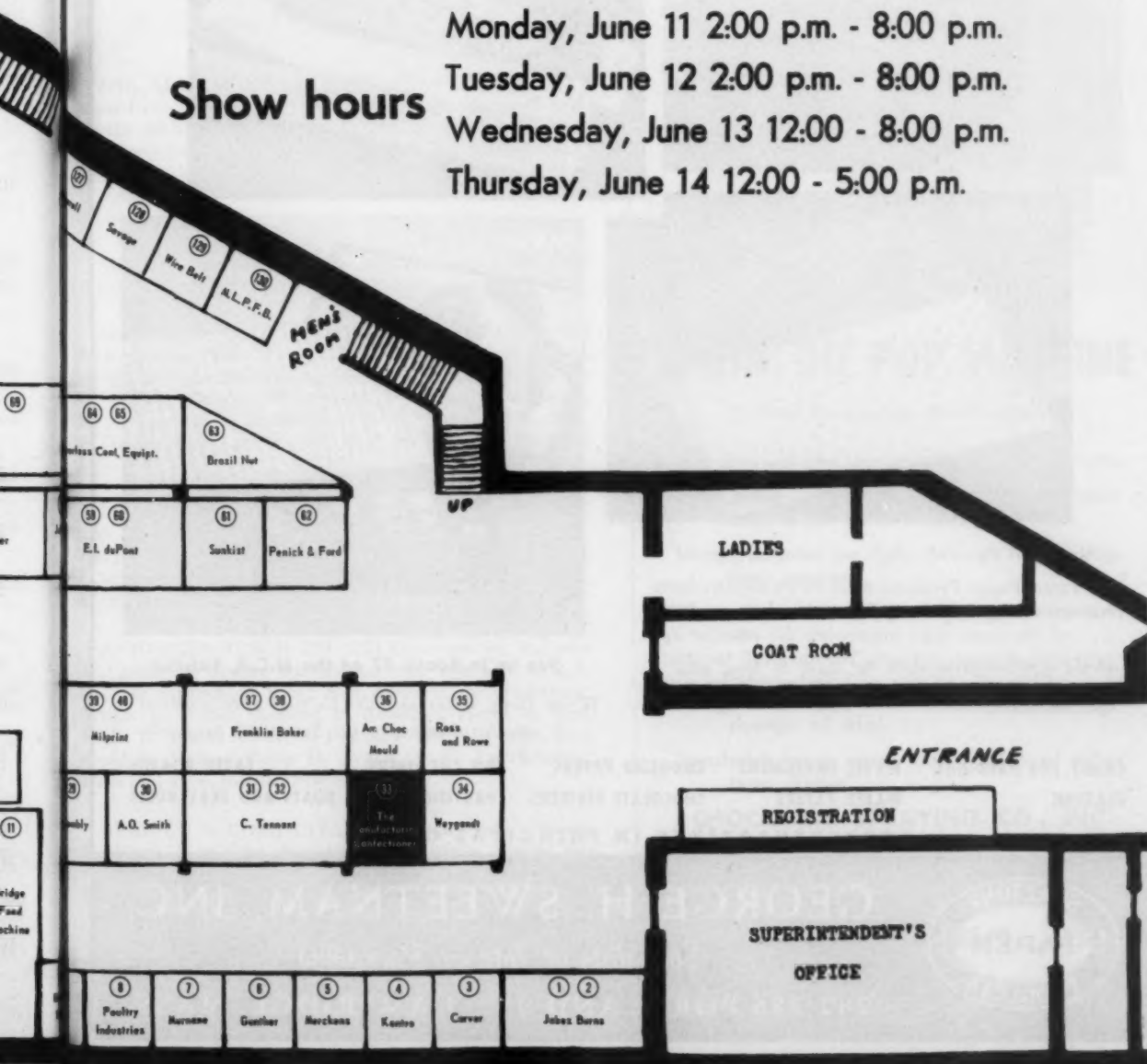
Show hours

Monday, June 11 2:00 p.m. - 8:00 p.m.

Tuesday, June 12 2:00 p.m. - 8:00 p.m.

Wednesday, June 13 12:00 - 8:00 p.m.

Thursday, June 14 12:00 - 5:00 p.m.



For MAXIMUM PROTECTION and ATTRACTIVENESS

USE



WAVEE
PARCHMENT



DECOPAD



FLOSSINE



PADSIT



Sweetone Paper Products meet every requirement for complete protection of confectionery products . . . at the same time improving the interior appearance of your packages. We have full facilities for cutting, dieing out and embossing to your specifications.

See us in Booth 47 at the N.C.A. Exhibit

Write Dept. C for samples to your specifications and/or literature on Sweetone products.

CANDY BOX PADDINGS
GLASSINE

WAVEE PARCHMENT
WAXED PAPERS

EMBOSSED PAPERS
CHOCOLATE DIVIDERS

DIE CUT LINERS
PARTITIONS

LAYER BOARDS
BOATS AND TRAY ROLLS

REPRESENTATIVES IN PRINCIPAL CITIES



GEORGE H. SWEETNAM, INC.

Specialists in Interior Packaging

282 286 PORTLAND ST. CAMBRIDGE, MASS.

List of EXHIBITORS

*with products to be displayed
and names of representatives
attending*

NCA Exhibition

**Mechanics Hall
Boston, Massachusetts
June 11, 12, 13, 14**

THE ALUMINUM COOKING UTENSIL CO., INC.
Wear-Ever Building, New Kensington, Pennsylvania.
Booths 92-93. Wear-Ever aluminum equipment for confectionery industry—candy bowls, ingredient bins and containers, kettles, bowl knives. In attendance: P. H. Schmid, T. Lorber, A. B. Wigley, B. Travers-Smith, R. G. Gustafson.

AMERICAN CHOCOLATE MOULD CO., INC. 173 Lafayette Street, New York 13, New York. Booth 36.

AMERICAN MAIZE-PRODUCTS COMPANY. 250 Park Avenue, New York 17, New York. Booth 91. Corn syrups and starches. In attendance: T. Sander Jr., James B. Melick, Charles H. Sanford Jr., F. J. Wobbekind, H. J. Hammer, J. B. Brouwer, C. C. Davis, T. P. Shea, R. H. Jacobsen, J. H. Rogeri, W. J. McKee, E. V. Haynes, J. L. Mull.

THE AMERICAN SUGAR REFINING COMPANY. 120 Wall Street, New York 5, New York. Booth 86. Domino cane sugars and sugar syrups. In attendance: J. W. Mooney, E. Tindall, E. G. Pickett, F. A. Clifford, E. W. Meeker.

ANHEUSER-BUSCH, INC. 721 Pestalozzi St., St. Louis 18, Missouri. Booth 43. Syrups and starches. "Candy tree" of confections using A-B products. In attendance: Arthur E. Weber, Richard F. Amacher, Harry A. Best, Willis J. Simms, Robert T. Regan, Frank V. Voyda, Raymond L. Haffey, Philip H. Regan, A. H. Luetkemeyer, Luke H. Grace, Joseph Dickson.

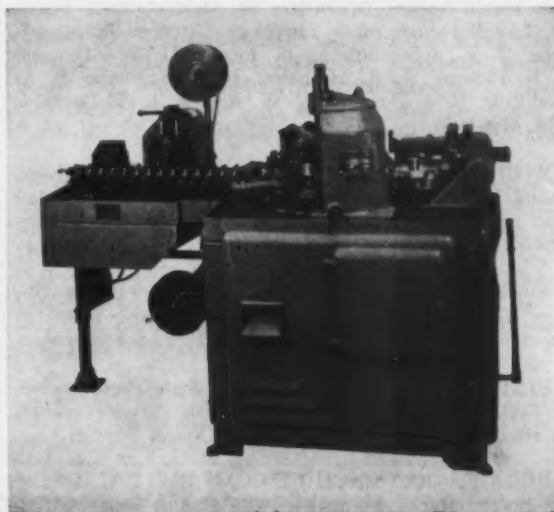
ARMOUR & COMPANY, Union Stock Yards, Chicago 9, Illinois. Booth 96. Kokolene and Armola, special fats for the Confectioner. In attendance: H. L. Versen, Geo. W. Eddington, L. M. Warren Jr.

ATLANTIC GELATIN, Div. General Food Corporation. Hill Street, Woburn, Massachusetts. Booth 88. Gelatin. In attendance: C. H. Watson, Arthur Tole, O. W. Johnson, Norman Vance Jr., H. Rosenthal, Frank McDonald, J. McAvoy, William Kent, H. P. Travers.

Come See

LATINI'S PROVED PROFIT MAKER

At N.C.A. Booths 83 & 84



LATINI DIE POP MACHINE

With Wrapping Attachment

200 formed and wrapped pops per minute.

Low labor cost operation—one operator does work of four people.

Wrapped pops go right through for cooling, then packing.

There is no handling, chipping, breakage, etc.

Die pop is free of fins—eliminating scrap.

Weight of pop is adjustable—without change of dies.

Sandwich wrap saves up to 50% of other type wraps.

CHOCOLATE SPRAYING CO., INC.

Chicago, Illinois

Representative:

John Sheffman, Inc.

152 West 52nd Street New York 36, N. Y.

ATLAS POWDER COMPANY, Wilmington 99, Delaware. Booths 107-108. Food ingredients and emulsifiers. In attendance: Norman D. Kennedy, Sherwood T. Cross, Charles S. Rowe, J. T. Zolper, H. B. Paul, G. Lensack, J. J. Byrne, D. C. VanWinkle.

FRANKLIN BAKER DIVISION, General Foods Corporation. 15th & Bloomfield Streets, Hoboken, New Jersey. Booths 37-38. Coconut. In attendance: Harry P. Haldt, Graham T. Brown, Charles W. Rehor, Harry T. Easton, Winston, Wesley L. Bonney, John I. MacDonald, George W. McCullum, A. Frank Lilien, Arthur E. Olson, David E. Miller.

WALTER BAKER DIVISION, General Foods Corporation. Pierce Square, Dorchester 24, Massachusetts. Booth 70. LaBelles—high grade chocolate coatings. In attendance: T. G. Churchill, L. E. Pierce, H. W. Thomas, C. R. Phoenix, A. B. Markhard, R. G. Schnyer, W. A. Medlicott, P. J. Downey, N. W. Kempf, J. A. Buzzard, J. M. McCloskey.

PAUL F. BEICH COMPANY, Bloomington, Illinois. Booth 17. Two models of the Whizolator for aerated food products. In attendance: Justin J. Alikonis, Charles Olson.

BRAZIL NUT ADVERTISING FUND. 100 Hudson St., New York 13, New York. Booth 63. Brazil Nuts. In attendance: T. R. Schoonmaker, Mrs. T. R. Schoonmaker.

BUHLER BROTHERS, INC. 2121 State Highway No. 4, Fort Lee, New Jersey. Booth 101. 5-roller refiner. In attendance: O. R. Schmalzer, A. Kohn, Beyeler.

BRIDGE FOOD MACHINE COMPANY, INC., Div. of the Rotary Machine Co., Inc. 7136 James Street, Philadelphia 35, Pennsylvania. Booth 11. In attendance: Gordon Wilcox.

BULKLEY, DUNTON PAPER COMPANY, S.A. 295 Madison Avenue, New York 17, New York. Booth 10. Aluminum foils for candy packaging. In attendance: Wm. R. Roberts, Russell M. Madden Jr.

JABEZ BURNS & SONS, INC. 600 W. 43rd Street, New York 36, New York. Booths 1-2. Chocolate molds, pictorial display of chocolate and confectionery machinery. In attendance: Barclay Spence, Robert Savy.

BURRELL BELTING COMPANY. 7501 N. St. Louis Avenue, Skokie, Illinois. Booth 127. Burrell Reflecto coated fine-weave for packing tables and other installations, Burrell Reflecto cooling tunnel belting and plaques, Burrell Mira-Gloss cooling tunnel belting & plaques, Burrell endless cooling table belts, endless feed table belts, caramel cutter boards, conveyor belting, and belting treatments. In attendance: James A. Linn, Howard E. Gage, Charles R. Becker, J. A. Taylor, Jeff Davis, Howard Aylesworth.

CALIFORNIA ALMOND GROWERS EXCHANGE. 1802 "C" Street, Sacramento, California. Booth 79. Blue Diamond Brand shelled and unshelled almonds. Natural and manufactured items. In attendance: Dale Morrison, Bill Dignam.

CARAVAN PRODUCTS COMPANY, INC. 35 Eighth Street, Passaic, New Jersey. Booth 85. "Slabcote," the miracle pure food slab lubricant. In attendance: Ira Grob, S. S. Edelberg, A. Weber.

CARLE & MONTANARI, INC. 95 Temple Avenue, Hackensack, New Jersey. Booths 75-76-77. High speed automatic wrapping machine CM-H56—"Super Royal" plastic machine, Toffee agitator cooker MRT. In attendance: Giovanni Carle, Emilio Cavalieri, Alfredo Tremolada, Giacomo Giannotti, Caesar A. Mascherin.

FRED S. CARVER, INC. One Chatham Road, Summit, New Jersey. Booth 3. Cocoa presses. In attendance: Wm. S. Carver, Robert W. Carver, Charles D. Meylan, D. J. Gregory.

CHOCOLATE SPRAYING COMPANY, INC. 2035-39 W. Grand Avenue, Chicago 12, Illinois. Booths 83-84. Latini Die Pop machine with wrapping attachment. In attendance: John E. Latini, John Sheffman, Gilbert Holmberg.

CLINTON CORN PROCESSING COMPANY. Clinton, Iowa. Booth 27. Products from corn. In attendance: H. A. Bendixen, A. C. Junge, E. D. Cottral, J. E. Greninger, P. H. Mueller, E. C. Alderson, L. D. Buhner, R. H. Jackson, W. F. Jackson, R. C. Rau, J. M. Search.

CORN PRODUCTS SALES COMPANY. 17 Battery Place, New York 4, New York. Booth 78. Cerelose Brand dextrose, confectioners' starches. In attendance: W. H. Gamble, A. N. McFarlane, E. W. Schmitt, R. R. Adam, H. V. P. Francis, J. M. Coe, J. E. Walz, J. M. Krno, F. E. Von Barga, G. Olsen, W. S. Winter, H. J. Heinstadt, G. W. Matthews Jr., S. W. Roberts.

J. C. CORRIGAN CO., INC. 41 Norwood Street, Boston 22, Massachusetts. Booth 48. Conveyor systems for handling bulk sugar via condensation-proof RR cars from refinery to in-plant bulk sugar system. In attendance: John F. Bertuccio, Robert Lachowicz, Joseph W. Corrigan, Joseph G. Collins.

CRESCENT METAL PRODUCTS INC. 18901 St. Clair Avenue, Cleveland 10, Ohio. Booth 103. Mobile racks, cabinets, carriers. Dryers, cold and hot storage cabinets. In attendance: George T. Baggott, A. J. Jindra, C. S. Thompson.

W. A. CLEARY COMPANY. Box 749, New Brunswick, New Jersey. Booth 21. In attendance: A. J. Rissetto.

CURRIE MACHINERY COMPANY. 1150 Walsh Avenue, Santa Clara, California. Booth 22. In attendance: E. V. Currie.

CUSHION PACK, INC. 150 Fifth Avenue, Hawthorne, New Jersey. Booth 109. Cushioning pads and liners for candy boxes and packages. In attendance: Veronica S. Mazur.

THE DOW CHEMICAL COMPANY. Midland, Michigan. Booths 122-123. Saran Wrap for packaging candy. In attendance: L. E. Fake, P. R. Collins, F. C. Dulmage Jr., J. C. Jameson, R. B. Merrill, F. J. Nolan Jr., J. S. Ryan, S. D. Smith.

E. I. DU PONT DE NEMOURS & COMPANY. Wilmington 98, Delaware. Booths 59-60.

DURKEE FAMOUS FOODS. 2670 Elston Avenue, Chicago 47, Illinois. Booth 87. Paramount (B,C,X,XX), Ara-

Avenue, speed Royal attend Tremo
 tex, Konut, Hydrol, Plastek, Melofil. Desiccated, creamed, sweetened and toasted coconut. In attendance: Harry S. Davis, Robert W. Wolfe, Paul Welker, W. A. Wymer, E. G. Kaupert, James Hammond, John Carter, John Toll, Roger Bulkley, Harry Aunes, Robert Stengel.

ELECTRIC SORTING MACHINE COMPANY. 3530 Eastern Avenue S.E., Grand Rapids, Michigan. Booth 114. Photoelectric sorting machine. In attendance: W. E. Wilson, A. H. Elve.

FOOTE & JENKS. 251 W. Euclid Avenue, Jackson, Michigan. Booth 124. Flavors. In attendance: Paul W. Thurston, T. J. Torjusen.

FORBES LITHOGRAPH COMPANY. P. O. Box 513, Boston 2, Massachusetts. Booth 81. Cartons, labels, wrappers, overwraps, displays, inserts, folders, recipe books, etc. In attendance: J. A. Bogart Jr., R. M. Lawrence, J. B. Osborn, V. C. Lanigan, F. H. Coombs, E. E. Peterson.

HARRY L FRIEND COMPANY. 200 Old Colony Avenue, South Boston, Massachusetts. Booth 100.

THE GIRDLER COMPANY, Votator Div. A Div. of National Cylinder Gas Company. 224 E. Broadway, Louisville 1, Kentucky. Booths 115-116. Votator chocolate tempering apparatus. In attendance: Lamar D. Roy, Dewey Lineberry, Ted Beck, Wally Gray.

J. W. GREER COMPANY. Wilmington, Massachusetts. Booths 66-67-68-69. Chocolate conditioner, Vibra-Pac, etc.

In attendance: Don S. Greer, Fred W. Greer, Roderick L. Grace, C. G. Cockinos, C. R. Becker, George Dolber, Willard S. Wheadon, Richard L. Biggs, John Grace, Lawrence Kinney.

GUNTHER PRODUCTS, INC. 600 E. Main Street, Galesburg, Illinois. Booth 6. G-400 whipping proteins. In attendance: Robert Gunther, Bernard E. Blake.

HANSELLA MACHINERY CORPORATION. 6 Depot Square, Englewood, New Jersey. Booths 18-19. Hansella automatic batch formers and feeders, Model 19H horizontal batch former, Model 65D rope sizer, and Model 73E vertical batch feeder. In attendance: E. Berten, Kurt Beyertz, William Thompson, Joseph L. Raffetto.

HOOTON CHOCOLATE COMPANY. 355 N. 5th Street, Newark 7, New Jersey. Booth 74. Chocolate coating, liquors and cocoa powders. In attendance: G. B. Dodd, E. J. Teal, Lloyd S. Fiscus, Frank J. Wolf Jr., Roger C. Hubbard, W. R. Schoener, Silvio Crespo, William Kroc.

THE HUBINGER COMPANY. 601 Main Street, Keokuk, Iowa. Booth 89. OK corn syrup, OK thin boiling starch, OK molding starch, OK Dri-Sweet corn syrup solids. In attendance: R. S. Fisher, R. L. Krueger, L. C. Watson, A. M. Robinson, G. R. Underwood, J. T. Flahiff, Curt Aagre, H. S. Brightman, C. H. Lawrence, D. L. Edwards, D. L. Tiger, Howard L. Peper, L. G. Drusen-dahl, J. T. Wallenbrock.

INSTITUTE OF AMERICAN POULTRY INDUSTRIES. 221 N. LaSalle Street, Chicago 1, Illinois. Booth 8. In attendance: Lee Campbell.

Cash in on the Calorie Counters... **BUILD BIGGER SALES**

**with LOW CALORIE
 CHOCOLATE CORDIALS
 made with
 BLANKE-BAER'S fruit centers**

Today's public is watching-the-waistline, yet they love and want sweet treats. You can help them do both with delicious chocolate covered cordials (pineapple, grape, cherry) which contain only half as many calories as creams and caramels.

Feature these flavors and cash in on extra sales from your calorie-counting trade.



BLANKE-BAER
 EXTRACT and PRESERVING COMPANY
 3224 South Kingshighway • Saint Louis 9, Missouri

H. E. WIEDEHANN
 CONSULTING CHEMIST
 CHEMICAL BLDG.
 SAINT LOUIS 1

Date: Jul 25 1955
 Lab No: 136980-93

Certificate of Analysis

For: Blanke-Baer Extract & Preserving Co
 Sample of: Candies

MARKED:

	Approximate Calories per pound
Raisin Cordial	800
Grape Cordial	803
Strawberry Cordial	783
Cherry Cordial	844
Pineapple Cordial	1014
Chocolate Caramel	1825
Chocolate Vanilla Cream	1785
Chocolate Peppermint Cream	2000
Chocolate Caramel Caramel	2176
Pecan Fudge	2116
Chocolate Almond	2186
Chocolate Brazil Nut	2400
Chocolate Walnut	1980

Respectfully submitted,
H. E. Wiedeann

J. A. JOFFEE & CO. 206 S. 13th Avenue, Mount Vernon, New York. Booth 58. Sugar decorations, icing flowers, candy ornaments. In attendance: Julian A. Joffe, Mr. and Mrs. Roland D. Joffe, Daniel E. Joffe.

A. KLEIN & CO., INC. 113-119 W. 17th Street, New York 11, New York. Booth 99. Fancy containers designed for the confectioner exclusively. In attendance: Joseph Ehrenfeld, William Michaelis.

H. KOHNSTAMM & COMPANY, INC. 87 Park Place, New York 7, New York. Booth 55. Certified food colors and flavoring extracts. In attendance: Andrew Torter, E. M. Moss, A. Holderried, Justin Pulver, Frank Hlavin, W. Kelley, C. Biddison.

THE KONTRO COMPANY, INC. North Main Street, Petersham, Massachusetts. Booth 4. In attendance: Arne R. Gudheim.

FREDERICK A. KRAUSE ASSOCIATES, INC. Frenchtown, New Jersey. Booth 112. Richly colored and delicately embossed metal candy containers. In attendance: Frederick A. Krause, Tom Althouse.

J. M. LEHMANN COMPANY, INC. 550 New York Avenue, Lyndhurst, New Jersey. Booth 105. New sieving and straining machinery and other improved chocolate machinery for processing of chocolate through its various production stages. Flow chart layouts and schematics available with displays of chocolate refiners, five and three roll sight-o-matics, cocoa liquor mills, mixers, tempering machinery, storage and tempering kettles, conches, emulsifiers, cracker and fanners, sieving and straining machinery, coating plants, automatic feed units to enrobers and hollow mould plants. In attendance: C. B. Hoffman, J. M. Sarlat, H. Mierswa, C. Dittmann, A. E. Hawkins, G. R. Linden.

LE ROY'S INTERNATIONAL RESEARCH LABORATORIES. P. O. Box 617, Point Pleasant, New Jersey. Booth 98. In attendance: Dr. Adrian LeRoy.

MERRILL LYNCH, PIERCE, FENNER & BEANE. 70 Pine Street, New York 5, New York. Booth 130. News and quotation ticker, statistical and market reports, market board. In attendance: Malcolm J. Forbes, Robert L. Stevenson, Robert Weihe, John Conheeney, Irwin Shishko, Paul Dusossoit.

THE MANUFACTURING CONFECTIONER. 418 North Austin Blvd., Oak Park, Illinois. Booth 33. The Manufacturing Confectioner, Candy Packaging, Candy Equipment, Purchasing Executives' Number, Books, Candy Buyer's Directory. In attendance: P. W. Allured, Stanley Allured, Allen Allured, James Allured.

THE McCARTER IRON WORKS, INC. Norristown, Pennsylvania. Booth 126. Liquid chocolate holding tanks, chocolate mixers and emulsifiers. In attendance: W. Robert Deemer.

MERCKENS CHOCOLATE COMPANY, INC. 155 Great Arrow Avenue, Buffalo, New York. Booth 5. Chocolate coatings, cocoa powder, chocolate novelties. In attendance: August Merckens, William Merckens, Leo Marsullo, Harvey W. Merckens, James P. Gray, R. B. Rice, R. E. Chumasero, M. D. Handler, Gardner E. Beach.

MILPRINT, INC. 4200 N. Holton Street, Milwaukee 1, Wisconsin. Booths 39-40. Wide variety of candy packages—rotogravure appetite-appeal, lithographed cartons, bar wraps. In attendance: William Heller Sr., James K. Heller, Lester Zimmerman, James Perkins, Joe O'Brien, Andy Fay, Frank Towle, Bob Moher.

MOLDED FIBERGLASS TRAY CO. Linesville, Pennsylvania. Booth 46. Fiberglass plastic stock boxes, trays and starch boards. In attendance: Jack Moore, Harold Ogust, Alan Henry, Carl Hornkohl.

MURNANE PAPER COMPANY. 1510 N. Kostner Avenue, Chicago 51, Illinois. Booth 7. "Lint-Free" paper board, rolls and cards. "Lint-Free" board in rolls, cards for roll feed, and magazine feed automatic wrapping machines. "Lint-Free" partitions and dividers for candy boxes and bags. "H. T. Non-Stick" treated for sticky candy. In attendance: J. Hobie Murnane, Robert P. Walsh, F. J. Murnane, Sally Peran, Marie Kuta.

NATIONAL EQUIPMENT CORPORATION. 153-157 Crosby Street, New York 12, New York. Booths 50-51-52-53-54. Short case sealer, bon bon enrober, automatic cherry dropper, continuous vacuum cooker, mechanical batch mixer, hydro-seal pump bars, speed wrap. In attendance: Joseph Greenberg, Herman Greenberg, Charles Balin, W. H. Kopp, Jack Debrovner, M. M. Guggenheim, George S. Perkins, Irving Debrovner, Otto Frank.

THE NESTLE COMPANY, INC. 2 William Street, White Plains, New York. Booth 42. Icecap colored coatings and Alps Mould, a new 2½-lb. milk chocolate block for break-up and sale by the manufacturing retailer. In attendance: F. S. Barbaro, J. E. Conley, J. E. Clarke, E. E. Ebel, R. A. Fife, J. J. Flynn, J. K. McGrath, C. A. Petmezas, W. F. Ratoff, A. L. Shirley, H. S. Watts, R. H. Wilson, A. M. Mullens, J. Grombach, T. F. Corrigan, G. W. Clapper, A. T. Newth, J. deSchoulepnikow, A. Kentie, D. B. Wells, Mrs. H. J. Britt.

NULOMOLINE DIVISION, American Molasses Company. 120 Wall Street, New York 5, New York. Booth 90. Nulomoline (invert sugar), invert sugar syrups, molasses, convertit (invertase), a display of year-round candies made with recently developed formulas, both for the larger and smaller candy manufacturers. In attendance: Fred Janssen, Karl Fromm, John Calder, Jas. A. King, Henry Thornton, Maurice Curran, James Stevenson, Andrew A. Kennan, Frank Knowlton.

THE E. T. OAKES CORPORATION. 26 Commack Road, Islip, Long Island, New York. Booth 97. Model 8M3 Oakes continuous automatic mixer. In attendance: E. Thomas Oakes, W. M. Griffith, Walter Bonavia.

PEERLESS CONFECTIONERY EQUIPMENT CO. 158 Greene Street, New York 12, New York. Booths 64-65. Hansel center filling pump, Hansel 6-roll automatic batch-roller, Hansel 4-stage sizer, Gabel continuous plastic machine, Hansel universal foiling machine, Model HPU, Hansel Hi Speed toffee cooker. In attendance: Samuel Schwartz, Norman Schwartz, Otto Hansel Jr.

PENICK & FORD, LTD., INC. 420 Lexington Avenue New York 17, New York. Booth 62. Improved Douglas Confectioners' thin boiling starches, "Tailor-made" Penford corn syrups, Douglas Confectioners' moulding starches. In attendance: D. P. O'Connor, H. A. Horan,

W. S. Russell, O. H. Tousey, P. G. Wear, F. J. McCrosson, L. S. Poer, S. F. M. MacLaren, J. A. Kooreman, Walter Brown, Norman Vance, O. W. Johnson, Arthur Brooks, Don Cahoon.

QUINCY PAPER BOX CO. 230 N. Third Street, Quincy, Illinois. Booth 82. Fancy candy boxes. In attendance: Paul Jochem, M. A. Jochem.

REVERE SUGAR REFINERY. 15 Broad Street, Boston 29, Massachusetts. Booth 45. In attendance: H. S. Walter.

RIEGEL PAPER CORP. 260 Madison Avenue, New York 16, New York. Booth 106. Functional packaging papers for the candy industry.

ROCKWOOD & CO. 88 Washington Avenue, Brooklyn 5, New York. Booth 80. Chocolate coatings, liquors, drops, cocoa powders. In attendance: Irving L. Cook, C. Dale Fox.

ROSS & ROWE, INC. 50 Church Street, New York 7, New York. Booth 35. Yelkin lecithins, Fries flavors, Placto milk and cream products. In attendance: W. F. Schlesinger, J. E. Lynch, O. M. Stout, H. R. Smith.

SAVAGE BROS. CO. 2638 Gladys Avenue, Chicago 12, Illinois. Booth 128. Model S-48 firemixer. In attendance: R. J. Savage, R. W. Emerson.

F. J. SCHLEICHER PAPER BOX COMPANY. 1811 Chouteau Avenue, St. Louis 3, Missouri. Booths 56-57. In attendance: Frank H. Schleicher.

SETTER BROTHERS, INC. Cattaraugus, New York. Booth 113. In attendance: C. E. Butler.

A. O. SMITH CORP. P. O. Box 584, Milwaukee 1, Wisconsin. In attendance: W. F. Manthei.

W. C. SMITH & SONS, INC. 2539 N. 9th Street, Philadelphia 33, Pennsylvania. Booths 94-95. Chocolate coating machine, chocolate melter, caramel cutting machine, cream center former, packing machine. In attendance: W. C. Smith Sr., W. C. Smith Jr., S. Chas. Jacques, Ted Merckens, Les Drusendahl, E. G. Buchanan, B. E. Blake.

A. E. STALEY MFG. CO. Decatur, Illinois. Booths 72-73. Confectioners' syrups, starches, and lecithin. In attendance: I. F. Wieland, R. L. Nagle, N. K. Hammer, L. York, R. Dombroski, R. E. Kilty, J. Copeland, G. H. Batchelder, G. A. T. Moore, O. Sutter.

STANDARD BRANDS, INC. 595 Madison Avenue, New York 22, New York. Booth 41. Pecans and other shelled nuts. In attendance: L. B. Breving, R. C. Owens, H. E. Holder.

SUNKIST GROWERS. 616 E. Grove Street, Ontario, California. Booth 61.

SUPERMATIC PACKAGING CORP. 132 Pacific Street, Newark 5, New Jersey. Booths 23-24-25-26. High-speed automatic candy and ice cream packaging machinery, Models 2160S, 2350 Super, 2500, 2650. In attendance: R. E. Farina, Phillip Marfuggi, Oreste Marfuggi, Enzo Seragnoli, Ariosto Seragnoli, Samuel Farina, John Lambertini, Joseph Cognazzi, Louis Izzo.

Quality is always remembered...



WILBUR SUCHARD CHOCOLATE CO., INC., LITITZ, PA.

for June, 1956

Page 75

GEORGE H. SWEETNAM INC. 286 Portland Street, Cambridge, Massachusetts. Booth 47. Confectioners' papers (paddings, dividers, trays, liners, embossed papers). In attendance: R. A. Whittier Jr., W. N. Poland, F. A. Sweetnam.

C. TENNANT, SONS & CO. OF NEW YORK. 100 Park Avenue, New York 17, New York. Booths 31-32. Units of new Nielsen coating machines including 7" baby model, 12" junior model, Universal fondant coater for fondant, chocolate and icing. Blowups of Theegarten high speed cookers and mixers, automatic batch rollers and rolling machines, photos of C.I.P. automatic weighers and Barraclough bagging, filling and sealing machine.

THERMAL EQUIPMENT CO., FARLEY MFG. CO. 4820 Searle Avenue, Skokie, Illinois. Booth 21.

TRAVER PARTITION COMPANY. 404 N. Sacramento Blvd., Chicago, Illinois. Booth 16. Complete line of partitions in all sizes, quantities, material and colors with supplementary inner packing material. In attendance: Cornelius Nooy, Don Heckert, William Dewire, William Matiejunas.

C. E. TWOMBLY CO. Medford, Massachusetts. Booth 29. Candy cups, box liners. In attendance: John E. Smith, George F. Twombly, Wellington Cramer, Lee Douglas, Elmer Anderson, Arthur Monk.

UNION CONFECTIONERY MACHINERY CO., INC. 318 Lafayette Street, New York 12, New York. Booth 49.

UNION SALES CORP., Distributor for Union Starch & Refining Co. 301 Washington Street, Columbus, Indiana. Booth 28. Products from corn. In attendance: J. I. Miller, E. B. Pulse, G. W. Anderson, D. Foster, W. W. Bissell, J. Amodei, F. Craven, C. W. McCrary, G. W. Hines, W. C. Sharp, V. F. Thorne.

VACUUM-RACINE MACHINERY CO. 15-17 Park Row, New York 38, New York. Booth 104. Racine cane and stick candy sizing, twisting and cutting machine with conveyors and automatic cane crooking device. In attendance: Claude J. Covert, George Scheu, Sidney V. Nelson, Leonard Shapiro.

VOSS BELTING & SPECIALTY COMPANY. 5645 N. Ravenswood Avenue, Chicago 26, Illinois. Booth 9. Satyn Gloss enrober belt, Hi-Gloss, feed and bottomer belts, batch roller belts, caramel cutting boards, Teflon coated fibre glass. In attendance: Robert J. Voss, Joseph H. Voss, A. T. Stevens, Al Horka, Harry Jenks, Ted Merckens, Bob Peck, Warren E. Frandsen, Frank A. Gusinde, Edward T. Kordt, Louis Anich.

WALTHAM LABORATORIES, Div. of Waltham Chemical Co. Waltham 54, Massachusetts. Booth 20. Laboratory analytical work, "filth" determinations, sanitation. In attendance: Richard L. Keenan, Dr. Jack Lapuck.

T. C. WEYGANDT COMPANY. 165 Duane Street, New York 13, New York. Booth 34. Chocolate moulds, "Oka" depositing machine, illustrations of "Rasch" automatic tempering machine, "Rasch" wrapping and foiling

machine, "Binder" chocolate machinery and cooling tunnels and multi-tiers, "Hoppe" egg former and "Hoppe" egg dipper. In attendance: Max Kaderli, Mrs. Edith B. Kaderli.

WHITE STOKES COMPANY, INC. 3615 S. Jasper Place, Chicago 9, Illinois. Booth 44.

WIRE BELT COMPANY OF AMERICA. Wilmington, Massachusetts. Booth 129. Wire coater and conveyor belting. In attendance: Earle F. Spencer Jr.

THE WOODMAN COMPANY. 647 E. College Avenue, Decatur, Georgia. Booths 13-14. Plur-A-Matic net weigher with Air-Weigh-Matic automatic bag filler and associated equipment. In attendance: J. L. Kelley, Hugh Wood, Larry Gill, Ed Rogers.

WRAP-KING CORPORATION. Berkshire Street, Holyoke, Massachusetts. Booth 110. DW Wrap-King wrapping machine to wrap candy pieces. In attendance: Valmore H. Ouellette.

Trade Press

Candy Industry, New York, N. Y. Booth 71.
The Confectioner Publishing Co., Milwaukee, Wis. Booth 125.
Confectioners Journal Publishing Co., Philadelphia, Pa. Booth 111.
Confectionery-Ice Cream World, New York, N. Y. Booth 15.
The Manufacturing Confectioner, Oak Park, Ill. Booth 33.

For
SUPERIOR QUALITY
and
SENSIBLE PRICES
it's
VORMENFABRIEK
MOLDS



- Bars - shell goods - novelties
- Stock or original designs
- For any automatic plant or for hand operation

Call or Write

JABEZ BURNS AND SONS, INC.

11th Ave. & 43rd St., N.Y. 36, N.Y. LA 4-4507
Representing N. V. Vormenfabriek, Tilburg, Holland

Our
rep
at th
can

T
Germ
contin
pean
their
mitted
occup
of 20
range
nature
graph
watch
ly as
(now
mere
expan
million
feet o
said t
this y
hall m
how m
that c
one p
exhibi
that a
In a

for Ju

Our exclusive annual
report of new developments
at the world's largest
candy machinery exhibit



The Hanover Fair

by J. KOCH, *London*

The annual trade Fair held at Hannover in West Germany, covering ten days at the end of each April, continues to be the principal occasion on which European confectionery machine manufacturers display their wares in bulk. Confectionery machinery is admittedly but a small proportion of the whole, for it occupies only a part of an exhibition hall, one out of 20 such halls. The whole Fair covers a very wide range of products, principally of a heavy engineering nature though including also items such as photographic equipment, glassware, office equipment and watches. This exhibition was first held in 1947, largely as a counter attraction to the original Leipzig Fair (now in Communist dominated territory); from a mere 300,000 sq. ft. of hall space in 1947, it has been expanded every year until now the figures are 2½ million square feet of exhibition halls, 1 million square feet of open air exhibits and 100 acres of car park, said to have held 45,000 cars on at least one occasion this year. A section which is limited to a part of one hall may not sound a great deal, but it is surprising how many days can be spent without going outside that one hall; it is even open to doubt whether any one person has ever been able to cover the whole exhibition at all thoroughly in the mere ten days that are available!

In spite of the wide variety of trades represented

and the enormous crowds which are attracted as a result, Hannover has certainly been remarkably successful in getting itself recognized as the Mecca of confectionery plant engineers and production technicians, and even of marketing executives, who seek to co-relate their ideas of what is desirable with what is actually practicable on already developed machines. With the back log of war time under-replacement of plant now virtually a thing of the past, competition amongst European machinery sellers is tending to harden and there is quite a race to put out the newest, the most ingenious, the fastest and occasionally even the most economical machine; the dominant urge is still to make the best machine, however; not the cheapest.

The modern machinery buyer is often of two minds, however, and tends to weigh up whether it is best to study the machinery market and buy the most attractive that offers, or whether it is preferable to study the confectionery market and the individual factory, then to devise the machine which will best suit the particular combination of circumstances. Under present day conditions, though, neither the machine maker nor the confectionery manufacturer can afford to act entirely independently, so that Hannover is tending to develop into a clearing house through which the policies of both can be mutualized;

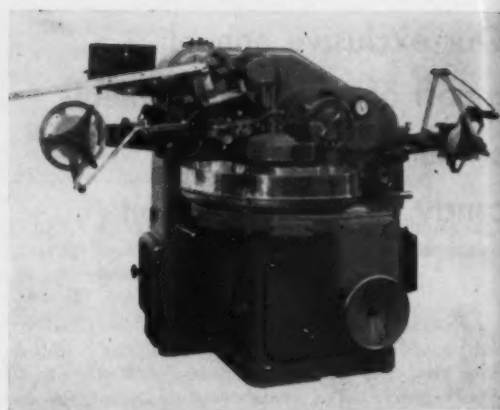
a study of the trends of fashion in product and process, as revealed by successive Hannover Fairs, gives a remarkably good impression of the general rate and style of development of confectionery manufacturing techniques in Europe.

With livening competition in the confectionery trade as well, packaging tends to take on a special importance and much of the most active development is currently in this field. Several influences are evidently at work. On the purely technical side, it is becoming rare to find a wrapping machine without at least some sort of automatic work transfer device (automatic feeders) and it is also becoming increasingly common to see continuous automatic lubrication of a totally enclosed mechanism.

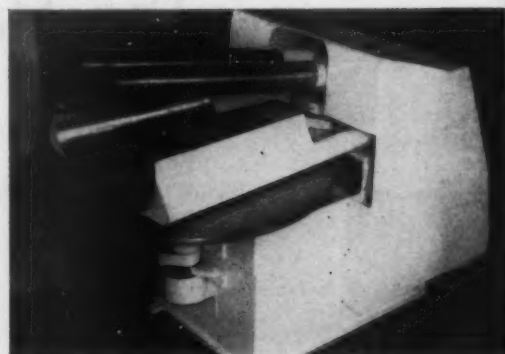
The first generally successful automatic sweet feeders were probably introduced by Messrs. G. D. of Bologna (Italy), who this year brought out three entirely new types of wrapping machine and raised the standard rate of twist wrapping to 500 per minute. Neither Forgrove nor Rose-Theegarten were any real distance behind G. D., however, if at all, and both had impressive displays at this year's Fair. The latest Rose-Theegarten cut-and-wrap machine, christened the "Titanium" model, actually claims a rate of 1000 pieces per minute (toffees, caramels, mint lumps and similar "chewy" confections). A newcomer in the sweet wrapping field is Carle & Montanari, who showed their first "universal" model, a 350 piece per minute machine with automatic feed and a selection of styles of wrap.

Automatic lubrication was probably first seriously introduced by Sapal of Lausanne, whose BN range of enclosed mechanism flooded lubrication machines is by now very well known. This year's specimen was the BN-p, a machine which foils the popular modern large chocolate biscuit line and similar coated bar goods at a rate of 150 per minute. By now, however, systems of automatic lubrication are already multiplying very fast. G. D. have always favored a continuous spray lubrication and the Rose-Theegarten preference appears to be for a drip feed; whatever the system, however, there is clear recognition of the fact that enclosed mechanisms are far cleaner and safer than the old exposed ones. Everyone also seems to have wakened up to the fact that they cut cleaning and maintenance schedules quite considerably, so that every wrapping machine manufacturer of importance has taken at least some steps in the direction of enclosed construction and continuous automatic lubrication.

On the product side, small unit pre-packaging, primarily with a view to sale in the now developing self service stores, is coming rapidly into prominence. The G. D. type 5000 machine, for instance, wraps individual sweets at the rate of 500 per minute and simultaneously bundles them into bars of 10, whilst a number of other makers do the same job with two separate machines. The Haensel-Junior type HN-k and the Hansella-Senning type 511 B can both be coupled to any standard cut-and-wrap machine, for instance, and will then bundle and over-wrap the whole output



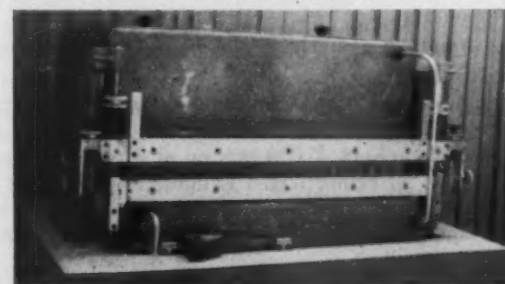
The new type 5000 G.D. (Bologna, Italy) sweet wrapping machine which wraps sweets individually at 500 per minute and delivers them foiled together in "bars," each containing 10 sweets.



The small Lichtenberg candy batch kneader and temperer.



A Haensel-Junior hard candy batch roller coupled to a new style automatic rope sizing machine, employing quadruple discs at the first two sizing stations.



The new "DOVO" double injection cream depositor made by Savy of Paris. Concentric pump nozzles inject a soft filling at the same time as the main deposit is made.

of the
ute) in
attract
require
70 to
Forgro
onstrat
Werke
Hans
ing wi
thene
to 18
of suff
parati

A s
to dev
to a f
by Ha
chine
anism
and L

On
and e
produ
their
dissol
lished
ers' is
mode
claim
Robu
petiti
excee
rope p

Oth
being
a pla
die p
up to
This
matic
quad
at rig
plast
batch
What
as w
I see
more
where

Ch
press
price
inves
there
crop
dema
20 m
show
contr
choc
Mont
new

of the machine (normally 550 to 650 pieces per minute) in bars of 5 or 10 sweets at a time, wrapped in attractively printed foils or films and also banded, if required. Roll wrapping was also demonstrated, at 70 to 90 rolls of pre-wrapped sweets per minute, by Forgrove. Automatic bag making and filling was demonstrated by Hansella, Hansella-Hassia, Industrie-Werke Karlsruhe and Optima Maschinenfabrik; the Hansella Transwrap machine seen in action was working with special sealers (and coolers) on pure polythene film, a tricky job which cuts the output down to 18 bags per minute, but which is thought to be of sufficient importance to warrant even such a comparatively low rate of working.

A somewhat exclusively German trend is the rush to develop foiling machines which will attach a thread to a foiled Christmas tree novelty. First developed by Haensel-Junior for his HPU universal foiling machine (with two basic varieties of thread fixing mechanism), it has now been copied by Rasch, Lauenstein and Loesch.

On the more basic processing levels, the aggressive and enterprising policy of Hansella in regard to mass production hard candy plant is being strongly felt—their ingenious concentric cylinder type continuous dissolving and pre-cooking unit is now well established and a whole range of continuous vacuum cookers is appearing, the latest being a low headroom model for which a row of technical advantages is claimed. Their two principal plastic plants, the Super-Robust and the Super-Rostoplast, are also highly competitive, the Super-Robust having now reached the exceedingly high working speed of 250 ft. of sugar rope per minute.

Other sweet making machine manufacturers are not being too slow, however, and Haensel-Junior showed a plastic production line based on the Gaebel chain die plastic machine, a system which was very popular up to the time when Gaebel became a war casualty. This line was also fitted with a new style of automatic rope sizer, the first two pairs of discs being quadruple, with their axes arranged in two planes at right angles to one another. The Baker Perkins Forplast plastic line, complete with space saving vertical batch feeder, was also on show and had its admirers. What was not on show was maybe quite as significant as what was on show, however, and nowhere did I see a drop roller plant—the more expensive, but more efficient and less wasteful, plastic lines are everywhere in the ascendant.

Chocolate making has, of course, been slightly depressed due to the general suspicion that raw cocoa prices are not to be relied upon; ambitious plant investment schemes suitable for chocolate makers were therefore generally absent, though there was the usual crop of refiner and conche types. European processors demand very finely ground cocoa masse (less than 20 microns) and there were new cocoa nib refiners shown by both Bauermeister and Thouet. Hydraulic controls are also rapidly gaining in popularity for chocolate refiners—starting from the original Carle & Montanari model, this year saw the introduction of a new type in both 3-roll and 5-roll forms, made by



The Sollich chocolate feeder for coating machines, made to fit under the coater band. A proportion of chocolate is continuously withdrawn from the coater, re-heated, blended with fresh chocolate and retempered.

Buhler of Uzwil (Switzerland); Bauermeister also had a new type, incorporating a special patented form of semi-flexible roll and embodying bearing pressure indicators though not the fully automatic type of hydraulic roll adjustment. Bauermeister engineers, incidentally, in conjunction with Bramigk & Co. Ltd., their London associates, have been quite largely responsible for some of the recent work on efficiency of power usage in chocolate refiners. Lehmann of Aalen have revived the pre-war Lehmann (of Dresden) design of rotatory conche, with some improvements, and expect to be able to achieve wonders in the way of quality control; Petzholdt of Frankfurt, also, produced a new version of their very low fat content processing conche, now equipped with a supplementary turbo chocolate thrower device which is believed to accelerate the flavour development processes. European conceptions of conche design have actually been relatively static for the last few years—the two aims, consistently followed by every manufacturer of new style conches (Aasted, Bauermeister, Carle & Montanari, Frisse, H. M. S., Lehmann, Mikrovaerk, Petzholdt, Thouet) being the maximum possible internal frictional working, to develop optimum fluidity and a smooth texture, followed by a relatively thorough interspersation with air, to promote flavour development.

Newcomers to Hannover were the two Danish manufacturers of chocolate moulding plant—Mikrovaerk and Aasted. Mikrovaerk, known all the world over for their "Jensen" automatic moulding plants, showed an exceptionally small and neat continuous spinning plant (automatic type), for Easter eggs and similar hollow chocolate novelties, to work at a rate of 5 moulds per minute (a higher rate being possible if the dimensions of the plant are extended to include longer spinning and cooling tracks). Aasted showed only a portion of his moulding plant, and other fragments of well known types of moulding and shell plant were shown by Bindler, Carle & Montanari and Winkler & Dunnebier.

No account of this Fair would be complete without a brief mention of some of the "specialities" which appeared for the first time. Sollich, for instance, produced a new drip feed type enrober chocolate feeder, designed to tuck under the stringing table of the

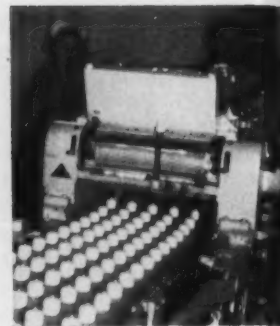
coater, but with the difference that a proportion of the chocolate in the coater tank is continuously withdrawn, re-heated, mixed with fresh chocolate and re-tempered. Another comparatively small firm, well known for small special purpose machines, is Lichtenberg of Hannover; this year, Mr. Lichtenberg could show a small but ingenious hard candy batch kneading and tempering machine and a new sugar pulling machine on which all three pulling arms rotate, the purpose being to eliminate the danger points at which a man's arm can so easily be trapped on the hitherto standard type of pulling machine. There was also a brand new double injection cream depositor made by Savy of Paris; concentric pump nozzles, built into an apparently ordinary single depositor design, deposit simultaneously an outer casing and an inner soft center (a similar double injection pump was also shown in position on the Winkler & Dunnebler Mogul).

Two very ambitious looking chocolate spraying plants were shown by Messrs. Gerhard Steinberg of Wasserburg, one for pan work and one for chocolate shell plants. The measures adopted for securing really oil free air—special compressors and multiple filters—were most impressive.

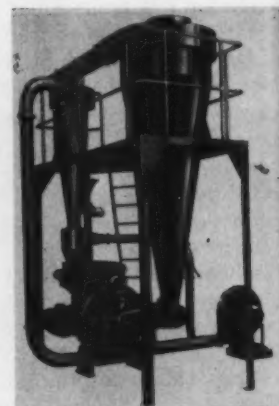
Finally, the popularity of the Negro Kiss, a light creamy foam filled article with a very thin coating of chocolate, lighter even than a marshmallow, has tempted machine manufacturers to develop designs which can mechanize the production of light articles of this type. Messrs. OKA (Otto Kremmling) of Darmstadt showed their latest type of automatic dressing machine adapted to deposit these fillings automatically onto a band (with wafer biscuits as well) and Messrs. Sapal showed one of their type ZRM universal foiling machines arranged for Negro Kiss foiling at a rate of 90 per minute. This is quite an achievement, for the Negro Kiss is essentially a very delicate article, but the Sapal machine appeared thoroughly at its ease on this work; it is claimed that it is the first automatic wrapping machine to have made a success of this very tricky job, though Messrs. Haensel-Junior were also claiming that the job was one which was within the capabilities of their type HPU universal foiling machine, three of which were on show, though set up for various types of Christmas tree novelty foiling, rather than Negro Kiss production. It was claimed, incidentally, that Negro Kiss production in Germany had now reached the astonishing figure of 4 million per day, being almost entirely in the hands of a comparatively few specialized producers.

All in all, the European machinery trade is very much alive and quite ready to fight any tendency of manufacturers to design plant privately; the series made machine ought certainly also to be cheaper and better in the long run, always provided that it can be built in adequate numbers yet remain sufficiently specialized not to have to forfeit too many of the advantages of the truly special purpose model. Certainly the exhibitors at Hannover make a brave effort to keep a jump ahead of their customers' requirements; this year's show also went far towards confirming the impression that they are succeeding in this struggle.

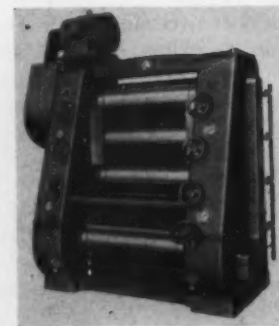
An Otto Kremmling OKA-Automat depositing Negro-Kisses (foamwork) ready for chocolate coating (after a short drying period).



A new cocoa powder grinding, tempering and sifting plant, displayed by Carle & Montanari (Milan).



The new Bauermeister type FW 551 chocolate refiner. The extended roller ends, which form an essential part of the semi-flexible style of roller construction, can be clearly seen. The instruments visible are pressure gauges.



The latest Haensel-Junior continuous fondant making plant, with a continuous cooker built onto the top of a standard fondant cooler and beater.



Candy Clinic

The Candy Clinic is conducted by one of the most experienced superintendents in the candy industry. Some samples represent a bona-fide purchase in the retail market. Other samples have been submitted by manufacturers desiring this impartial criticism of their candies, thus availing themselves of this valuable service to our subscribers. Any one of these samples may be yours. This series of frank criticisms on well-known branded candies, together with the practical "prescriptions" of our clinical expert, are exclusive features of The MANUFACTURING CONFECTIONER.

Marshmallows; Fudge

Code 6F6 Pecan Pralines

1 oz.—10¢

(Purchased in a drug store,
Dallas, Texas)

Wrapper: Cellulose wrapper printed in red and white.

Praline:

Color: Good

Texture: Too chewy

Pecans: Good

Taste: Good

Remarks: Piece is more like a soft caramel than a praline.

Center:

Color: Good

Texture: Good

Taste: Good

Cracker: Soft and tough

Remarks: Suggest piece be made about one half the size as it gets all over your hands when you bite into it. Suggest name, address etc. be printed on wrapper to avoid trouble with the Food and Drug Dept.

Remarks: Texture needs checking up as piece is more like a caramel than a Praline. Suggest name, address etc. be printed on the wrapper to avoid trouble with the Food and Drug Dept.

Code 6D6 Maple Flavored Marshmallow Creme Bar

2¼ ozs.—10¢

(Purchased in a drug store,
Dallas, Texas)

Appearance of Bar: Good

Wrapper: Bar is round. Cellulose wrapper printed in amber color, black and white.

Piece: Piece is a round cream pattie covered with milk chocolate containing chopped peanuts.

Coating: Good

Center:

Color: Good

Texture: Good

Flavor: Good

Remarks: A good eating piece.

Code 6B6 Pecan Pralines

2 ozs.—15¢

(Purchased in a drug store,
Dallas, Texas)

Wrapper: Cellulose wrapper, no name, address or ingredients printed on wrapper.

Praline:

Color: Fair; too dark

Texture: Very chewy

Pecans: Good

Taste: Good

Code 6A6 Custard Marshmallow on Cracker

No weight or price stated

Piece: Piece is about two inches high and about 1½ inches wide.

Wrapper: Gold foil wrapper, overall print of colored boy's face printed in black and red.

Coating: Good

Candy Clinic Schedule For the Year

JANUARY—Holiday Packages; Hard Candies

FEBRUARY—Chewy Candies; Caramels; Brittles

MARCH—Assorted Chocolates up to \$1.00

APRIL—\$1.00 and up Chocolates; Solid Chocolate Bars

MAY—Easter Candies and Packages; Moulded Goods

JUNE—Marshmallows; Fudge

JULY—Gums; Jellies; Undipped Bars

AUGUST—Summer Candies and Packages

SEPTEMBER—Bar Goods; 5¢ Numbers

OCTOBER—Salted Nuts; 10¢-15¢-25¢ Packages

NOVEMBER—Cordial Cherries; Panned Goods; 1¢ Pieces

DECEMBER—Best Packages and Items of Each Type Considered
During Year; Special Packages; New Packages

Code 5E6 Low Calorie Toffees 12 ozs.—\$1.00

(Purchased in a chain drug store,
Los Angeles, Calif.)

Appearance of Package: Good.

Box: Large square box, slip cover. Bottom white printed in blue, yellow and grey. Cover yellow printed in blue and grey. Cellulose wrapper.

Appearance of Box on Opening: Fair.
Pieces are wrapped in cellulose.

Candy:

Color: Good.

Texture: Too hard.

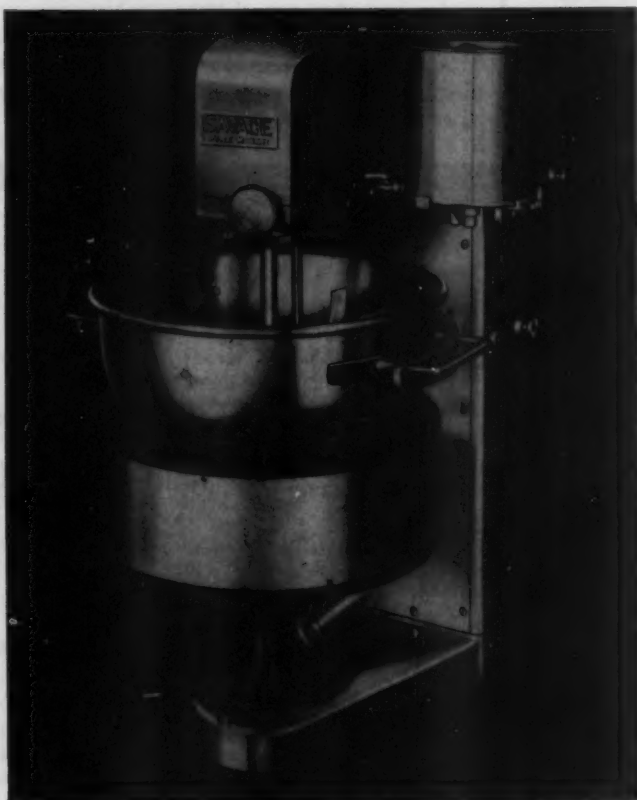
Taste: Poor.

Remarks: Candy had an odd taste. Suggest a good lemon or orange oil be used to improve the flavor. Highly priced for this type of confection.

SAVAGE LATEST FIRE MIXER

MODEL S-48

Thermostatic Gas Control—Variable Speed



The Savage Latest Fire Mixer, Model S-48, is Streamlined and Sanitary and has many new features and conveniences:

- Automatic Temperature Control
- Variable Speed from 30 to 60 RPM
- Break-back within floor space 32" x 48"
- Aluminum Base and Body Castings
- Atmospheric Gas Furnace with Stainless shell
- Removable Agitator, single or double action
- Stainless Cream Can and Stainless Drip Pan
- Copper Kettle 24" diameter 12½" deep or 16" deep

You can save labor and obtain uniform batches by setting the thermostat for degree cook desired. It cooks and mixes batches of caramel, peanut brittle, peanut candies, fudge, nougat, gum work, and with double action agitator is ideal for coconut candies and heavy batches.

Your inquiry invited

SAVAGE BROS. CO.

2638 Gladys Ave.

Chicago 12, Ill.

Since 1855



Code 6E6
Chocolate Coated Marshmallow
Egg With Almonds
1½ ozs.—10¢
(Purchased in a drug store,
New Orleans)

Appearance of Egg: Good
Wrapper: Foil wrapper printed in red,
white and blue.

Egg:
Coating: Good
Center:
Color: Good
Texture: Tough
Taste: Good

Remarks: Marshmallow formula needs
checking up as it is too tough. A little
highly priced at 10¢ for 1½ ozs.

Code 1P6
Candy Coated
Chewing Gum, 5¢

(Purchased in a railroad depot,
Tokyo)

Appearance of Package: Good. Looks
exactly like one of our panned gum
packages.

Container: Folding box printed in blue
and white. Cellulose window.

Gum:
Panning: Fair.
Jacket: Fair.
Texture: Poor.
Flavor: Rank.

Remarks: The peppermint used in this
gum was rank.

Code 1R6
Coffee Caramels, 8½¢
(Purchased in a candy shop,
Fujiyoshida, Japan)

Appearance of Package: Good.
Container: Folding box printed in red,
black and white. Cellulose wrapper.
Caramels: 16 pieces wrapped in wax
paper.

Color: Good.
Texture: Partly grained; too soft.
Flavor: Fair.
Flavor: Fair.

Remarks: Very cheap quality caramel.
Entirely too soft for a caramel.



THE MANUFACTURING CONFECTIONER

w

red,

eds
ttle

ooks
gum
blue

this

red,
pper.
wax

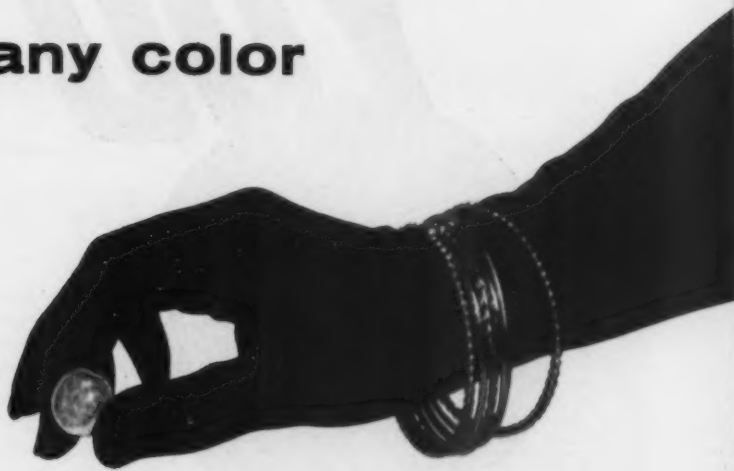
amel.



ONER

Pick a color

any color



Stange can produce it

Color is the first overture your product makes to a prospect. Is that color as *inviting* as it could be? Does your color help make as many sales as it should? Stange color technicians can *create* the color you desire . . . and produce it with scientific precision each time you reorder. The Wm. J. Stange Co. Laboratories and Technical Staff will gladly assist you in capitalizing on all the stimulation that *color* can bring to your products. Consult your Stange representative or write.



PEACOCK BRAND CERTIFIED FOOD COLOR

WM. J. STANGE CO. Chicago 12, Ill. • Paterson 4, N. J. • Oakland 21, Calif.

Canada: Stange-Pemberton, Ltd. New Toronto, Ontario • Mexico: Stange-Pesa, S.A. Mexico City
Litho in U.S.A.

SEE YOU



We'll have the
red carpet out and all the
latest information
on Penford Corn Syrup and
Douglas Confectioners' Moulding
and Thin Boiling Starches.

N.C.A.

See you in
the
STATLER HOTEL
BOSTON

Mechanics Hall
BOSTON
BOOTH 62

IN BOSTON

PENICK & FORD, LTD.

INCORPORATED

450 LEXINGTON AVE., NEW YORK 17, N.Y.; 1831 MARIETTA BLVD., ATLANTA, GA.;
CEDAR RAPIDS, IOWA; 15 CALIFORNIA ST., SAN FRANCISCO 11, CALIF.



(P)

Appe
Conta

typ
like
bla

Piece
in
Col
Ter

Tas

Rema
the
is a
Hig
fect

(Pu

Appe

Box:
and
Rec
and
red

Appe

Numb

pie

Coatin

Col

Glo

Stri

Tas

Center

Cor

Tas

Rema

whi

goo

the

stan

Hig

Sent i

Appe

Box: C

pap

Code 5J6
Licorice Candies
10 ozs.—59¢

(Purchased in a chain drug store,
 Los Angeles, Calif.)

Appearance of Package: Fair.

Container: White board, square, folding type, printed with black dots, looks like a large disc. Name printed in black. Cellulose wrapper.

Piece: Similar to salt water taffy, wrapped in wax paper.

Color: Good.

Texture: Good.

Taste: Licorice, good.

Remarks: Suggest a smaller box. Unless the consumer likes licorice, ten ounces is a trifle too much of the same thing. Highly priced for this type of confection.

Code 5M6
Cordial Cherries
1 lb.—\$1.65

(Purchased in a chain drug store,
 Los Angeles, Calif.)

Appearance of Package: Good.

Box: Oblong shaped, extension edges top and bottom. Padded top, slip cover. Red paper top, name embossed in gold and green. Imprint of cherry cluster in red and green. Cellulose wrapper.

Appearance of Box on Opening: Good.

Number of Pieces: 36. Crate dividers, 2 pieces foiled.

Coating, Light:

Color: Good.

Gloss: Good.

Strings: Good.

Taste: Good.

Center:

Cordial: Fair.

Taste: Fair.

Remarks: Center contained too much egg white, also lacked flavor. Suggest a good cherry flavor be used to improve the center. Coating is not up to the standard used on other \$1.50 cherries. Highly priced at \$1.65 the pound.

Code 5P6
Assorted Chocolates
1 lb.—\$1.35

Sent in for Analysis #4781.

Appearance of Package: Good.

Box: Oblong shape, one layer type. Pink paper top overall design of squares

**BULK SUGAR
 HANDLING
 and STORAGE
 SYSTEMS**

J. C. Corriqan Co., Inc.

ESTABLISHED 1925

CONVEYOR SYSTEMS

Conveys sugar from
 unloading point to
 storage to production.

Inquiries invited

41 NORWOOD ST., BOSTON 22, MASS.

with lines. Name in white and gold on dark brown and black in center of top. Bottom of box wrapped in cellulose.
Appearance of Box on Opening: Fair.
 See remarks.

Number of Pieces:

Light Chocolate: 20.

Dark Coated: 14.

Coatings: Light and dark chocolate.

Colors: Good.

Gloss: Good.

Strings: Fair.

Taste: Good for this priced candy.

Light coated centers:

Chocolate Nut Cream: Good.

Buttercream: Good.

Nut Brittle: Good.

Nut Cream: Good.

Vanilla Nut Caramel: Good.
Chocolate Nut Caramel: Good.
Orange Cream: Good.
Nut Nougat: Good.
Caramallow: Good.

Peanut Clusters: Nuts are not roasted enough.

Dark Coated Centers:

Coconut Cream: Good.

Pink Cream: Could not identify flavor.

Vanilla Cream: Good.

Mint Jelly & Marshmallow: Good.

Buttercream: Good.

Nut Cream: Good.

Jelly: Good.

Raspberry Jelly: Good.

Mint Cream: Good.

Assortment: Good.

New Whipping Agent

replaces $\frac{1}{3}$ to $\frac{1}{2}$ egg white or gelatin to

CUT COSTS...IMPROVE PRODUCT

DAIRY-WHIP is an improved whipping agent for confections. It replaces up to 50% of the egg white solids in standard formulas — greatly reduces total ingredient cost.

Dairy-Whip reduces weep, retards corn syrup separation and improves texture. Finished candies retain desirable color and flavor. You get up to 50% more shelf life on marshmallow cremes, fountain toppings, mazettas and frappe.

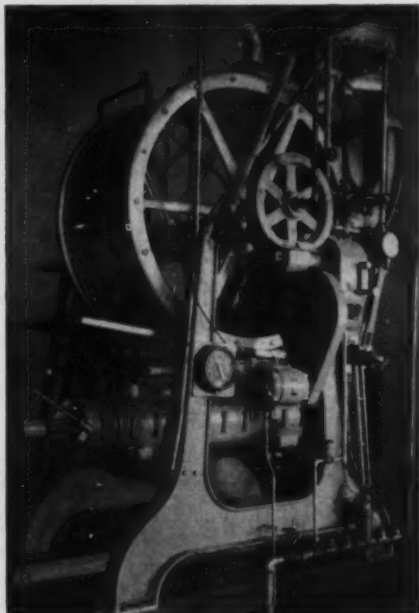
Ripple marshmallow made with Dairy-Whip pumps easier at low temperatures and shears more readily. In cast marshmallow formulas, Dairy-Whip replaces 15% to 20% of the gelatin to cut ingredient costs — making creamier, smoother, more tender marshmallows that have greater stability in storage.



For Caramels, fudge and taffy, use Sweet Dairy-Whey. Replace 50% or more of the nonfat milk solids . . . can cut dairy ingredient costs up to 50%. Extends shelf life because it replaces tough casein protein to boost moisture retention. Dairy-Whey meets U.S. Extra Grade specifications. It's spray-dried, non-hygroscopic, uniform high quality the year around.

Write Technical Service Department for complete information covering specific uses. Please specify product.

WESTERN CONDENSING COMPANY • Appleton, Wisconsin



NONE SO FLEXIBLE
SO SMOOTH
SO UNIFORM
SO ECONOMICAL

That's what practical candymen say about the Hohberger Continuous Cream Machine.

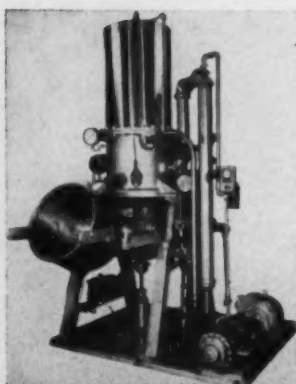
Production: variable up to 2000 lbs. per hour.

Straight sugar fondants with doctoring or any amount of corn syrup.

Final cook easily and accurately controlled.

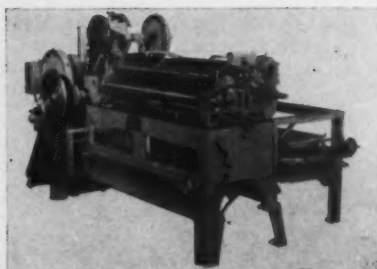
Syrup properly cooled without agitation.

Variable-speed beating for all types of fondant.



**HOHBERGER IMPROVED
CONTINUOUS HARD
CANDY COOKER**

500—2,000 lbs. per hour of clear, dry, glossy sugar.
Positive Piston Sugar Pump
Split-second Hydraulic Lift
2-Stage Rotary Vacuum Pump
Final Cook Temperature Indicator



HOHBERGER BALL MACHINE

Only one operator required to produce up to 1,200 lbs. per hour.

You can produce:

Balls — clear, pulled or honey-combed filled—9/16" to 1 1/2" diameter.

Sunbeam starlights: stripes brought down to center without expensive inlay.

Root Beer Barrels and any other shapes.



**HOHBERGER
Continuous Hard Candy
Cutter**

Forms solid or filled pillows, straws and waffles at speeds up to 150 feet per minute.

Gradual formation of piece insures positive sealing of filled candies. Multi-design waffle chain creates the illusion of assortment.

Split chain available to make pillows and straws on same chain.

Special chains available for bars and other candies.

Variable speed drive to conform with spinner's ability.

Hohberger Manufacturing Company — Chicago, Ill.

Representative

John Sheffman, Inc.

152 W. 42nd St.

New York 36, N. Y.

Remark
sorte
exam
on o
beca
sider
on th
It co
coate

(
Appear
Stock
box,
ribbe
in b
Fudge:
Colo
Text
Taste
Remark
we l
good
best

Sent in
Appear
Wrapp
pape
Bar: E
wi
Choc
Cent
Remark
bars
olate

A
(Pur

Appear
Box: S
pape
lulos
Appear
Numbe
Confec
Noug
Mars
Spril
Rasp
Spril
Coco
Mint
Assorte
Colo
Text
Flav
Uncoat
Wra
Pecan
Wra
Pecan
Assort
Remark
price
high

for Ju

Remarks: One of the best boxes of assorted chocolates at this price we have examined this year. Appearance of box on opening was not good, probably because of shipping. There was a considerable amount of fine chocolate dust on the top of most dark coated pieces. It could not be noticed on the light coated pieces.

Code 5Q6
Chocolate Nut Fudge
1 lb.—No price stated
(No information on purchase)

Appearance of Package: Good.

Stock Box, Sold in Bulk: Oblong shape box, 2 layer type, tied with red grass ribbon. Embossed buff paper top, name in brown.

Fudge:

Color: Good.

Texture: Good.

Taste: Good.

Remarks: The best chocolate nut fudge we have examined this year. A real good old fashioned fudge and of the best quality.

Code 5R6
Milk Chocolate Covered
Wafer Fingers
1½ ozs.—10¢

Sent in for Analysis #4779.

Appearance of Bar: Good.

Wrapper: Inside foil wrapper, outside paper band, red printed in buff.

Bar: Bar is a Nabisco cracker coated with milk chocolate.

Chocolate: Good.

Center: Good.

Remarks: One of the best coated cracker bars we have examined this year. Chocolate had a very good milk taste.

Code 5B6
Assorted Summer Candies
1 lb.—\$1.65

(Purchased in a department store, Dallas, Texas)

Appearance of Package: See remarks.

Box: Square, one layer type, white glazed paper top. Name printed in blue. Cellulose wrapper.

Appearance of Box on Opening: Good.

Number of Pieces: 35.

Confections, Coated Pieces:

Nougat: Good.

Marshmallow: Good.

Sprill Top Orange Cream: Good.

Raspberry Cream: Lacked flavor.

Sprill Top Chocolate Cream: Good.

Coconut Paste: Good.

Mint Jelly & Cream: Good.

Assorted Gum Drops:

Colors: Good.

Texture: Good.

Flavors: Good.

Uncoated Chocolate Nougat, Cellulose

Wrapper: Good.

Pecan Nougat Roll Slice, Cellulose

Wrapper: Good.

Pecan Fudge Roll Slice: Good.

Assortment: Good.

Remarks: Cheap looking box for this priced candy. Candies are good but highly priced at \$1.65 the pound.

Code 5N6
Salt Water Taffy
7¼ ozs.—29¢

(Purchased in a chain drug store, Los Angeles, Calif.)

Appearance of Package: Good.

Bag: Cellulose bag printed in green and white. Wax paper wrapper.

Colors: Good.

Texture: Good.

Flavors: Fair.

Centers: Good.

Remarks: Some of the flavors are not up to standard found in other salt water taffy.

Code 6C6
Pecan Pralines
2 ozs.—10¢

(Purchased in a drug store, Dallas Texas)

Wrapper: Cellulose wrapper printed in red.

Praline:

Color: Good

Texture: Too chewy

Pecans: Good

Taste: Good

Remarks: Texture needs checking up as piece is too chewy for a Pecan Praline. Good quality of pecans and candy. Has a good flavor.

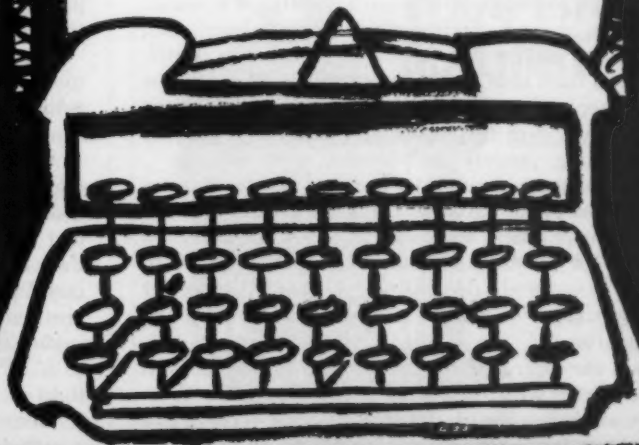


Anheuser-Busch, Inc.
CORN PRODUCTS DEPARTMENT
ST. LOUIS, MO.

Dear Mr. Candy Maker:

Hope you plan to attend
the NATIONAL CONFECTIONERS'
ASSOC. CONVENTION
June 11, 12, 13, 14, at Boston

We'll meet you
in our Booth—No. 43—in the
Mechanics Hall



Depositing Candy in Moulds

by JOHN W. VASSOS, *Stephen F. Whitman & Sons, Inc.*

Moulds are used in the confectionery industry in the manufacture of cast candy, hard candy and chocolate.

CAST-STARCH MOULDING

Most creams, jellies, marshmallows, etc. are cast by a depositor and some are deposited by hand into corn starch. Other moulding mediums, such as calcium carbonate, powdered sugar, etc. have been tried but without too much success. Impressions in starch are made by a printing board. This board is made of well seasoned oak back strips and white pine cross strips. Over this is placed either bolting cloth or fine brass wire cloth to which is fastened plaster of paris, plastic or aluminum moulds.

Plaster of paris moulds are not too difficult to make. Take some of your children's putty (plastalene) and, without any undercuts, make any design you desire. When you have obtained the pattern you like, place it in a beaker and cover it with 5% agar solution about one-half inch over the top of the pattern. While the agar is setting, prepare the plaster of paris mixture.

Although theoretically 100 parts of plaster require approximately 20 parts of drinking water to form gypsum, in practical use more water is necessary. In order to get the highest compression strength, 30 to 40 parts of water are used. If the plaster of paris is not properly soaked or mixed, pinholes will form in the moulds after they are used for a short time.

When the agar is firm, remove the plastalene and fill the cavity with plaster of paris. Then vibrate to remove air. When the plaster of paris is set, remove and place the pattern, covered with a plastic sheet, under the heating unit of a swedger. A swedger is a machine used in dental laboratories for making temporary plastic dentures and can be obtained at any dental supply house. When the plastic becomes soft, immediately

place under pressure and apply 50 psi for five minutes. Release pressure, remove plaster of paris mould and use plastic pattern to make as many plaster moulds as necessary. Dry plaster of paris moulds at 150° F. with forced air if possible. Moulds that are not dried properly will become soft and mouldy in their applications. Moulds that are dried too much will crumble. They are then glued to boards with Le Page's Strength Liquid Glue, No. 35, and starch.

Many firms paint the plaster of paris moulds black with stove paint and then cover them with water glass (sodium silicate). This helps the moulds to make better impressions for the starch will not adhere as readily as to a plain mould. It also protects the plaster of paris pattern and, if the mould should fall off the printing board, it can be found without too much trouble.

Plastic moulds are also being used by a few firms for making impressions in starch. They make excellent printings but are fairly costly and can shatter on rough usage.

Aluminum moulds were first used in 1912 for making impressions in starch. Any design can be fashioned from a drawing or a sample of candy. The designs are first cut from plaster of paris. All master patterns are then made of white metal and attached to a white metal pattern strip. From this the aluminum castings are made in the conventional foundry practice. The castings are usually milled on both sides of the strip to a 45° angle. This angle presses the starch down tight so no loose starch will fall into the impressions. If there is not enough room between the strips to get a sufficient angle, the strips are milled to a 90° angle and butted together. Holes must be cut by the manufacturer in the sides between the moulds to permit the escape of air in order to prevent collapsing of the impressions.

Up to
porous
moulds
before
tioners
glaze.
moulds

After
fastened
steel bu
with a
lather i
polishes
surface
washed
wood s
board.
scrubbe
out fea

Alum
for they
very stu
more th

At th
are ma
been de
of synt
oils, fat
ing hig

The i
was pat
rubber
phur an
ture fo
candy
moulds
ments i
half th
insured
easier o
turn of
the ext

The p
ton typ
of maki
able to
electric
moulds
medium

Flexi
rubber
calcium
wax, et
for adde
adde' t
know t
often a

New
10 to 1
use. In
cold w

for Jun

Up to a few years ago, aluminum moulds had a dull porous finish. Moulding starch would adhere to the moulds causing rejects, and it took a break-in period before this condition was eliminated. Many confectioners were forced to have the moulds coated with a glaze. This is no longer necessary, for aluminum moulds are now highly polished.

After the milling operation, the metal strips are fastened to a revolving burnishing barrel. Hardened steel burnishing material of all sizes and shapes mixed with a detergent lubricant and water to form a soapy lather is tumbled over against the strips. This action polishes the strips and, at the same time, makes the surface very hard. After burnishing, the strips are washed and dried. Countersunk holes are drilled for wood screws to attach the moulds to the moulding board. This makes the entire unit sanitary. It may be scrubbed with hot water or steamed with a hose without fear of harm.

Aluminum moulds are being used very successfully for they make excellent impressions in starch and are very sturdy. This type mould costs approximately 30% more than the plaster of paris type.

CAST-RUBBER MOULDS

At the present time, all the rubber mats for candy are made from natural rubber. Experimentation has been done with Neoprene, one of the four basic types of synthetic rubber, for it has excellent resistance to oils, fats, water and heat and shows promise in moulding high fat centers.

The idea of the rubber candy mould originated and was patented in 1887. The first mats were of the solid rubber type and were vulcanized by the use of sulphur and heat (steam pressure) at the right temperature for the right length of time. In 1895, flexible candy moulds, later referred to as skeleton type moulds, were developed and patented. The improvements involved a savings in rubber of more than one-half the weight of the old form solid moulds, and insured a more rapid cooling of the candies cast and easier demoulding. The production of moulds at the turn of the twentieth century was still limited due to the extreme cost of the dies.

The present rubber moulds are still called the skeleton type. The manufacturers have found new methods of making dies, new basic ingredients and have been able to cut curing time in half by vulcanizing with electricity. With these improvements, the rubber moulds are competitive in cost with other moulding mediums.

Flexible rubber candy moulds consist of natural rubber and harmless ingredients. These ingredients, calcium carbonate, titanium dioxide, staybelite resin, wax, etc. are mixed with more than 50% natural rubber for added strength. A curing agent (D.O.T.G.) is added to facilitate vulcanizing. It may interest you to know that artificial chocolate flavor or vanillin are often added during the process.

New rubber candy moulds should be boiled for 10 to 15 minutes in a 3% caustic soda solution before use. In making the solution, add the caustic soda to cold water. When dissolved, insert the rubber mats

AUTOMATION FOR AERATED FOOD PRODUCTS WITH THE *Whizolator*

- .. Simplest of Operation
- .. Whips Without Beaters
- .. Optimum whip with any whipping agents
- .. Sanitary in place cleaning
- .. Air Diffusion System Has No Moving Parts
- .. Minimum Maintenance
- .. Use for Marshmallow, Frappes, Nougats, etc.
- .. Lower Production Costs

Visit Booth 17, Confectionery Industries Exposition, Mechanics Bldg., Boston, Mass.

OR

WRITE — WIRE — PHONE TODAY

PAUL F. BEICH CO.

Bloomington, Ill.

Phone 38201

Speed Makes The Difference! **450 CARMELS CUT and WRAPPED EVERY MINUTE IDEAL HI-SPEED WRAPPING MACHINE**



Speed that's always dependable — Safety than can be counted on — maximum production at least cost—that's the Ideal Special Caramel Wrapping Machine!

Only 2 personnel required for this entirely automatic operation.

Write today for FREE Brochures.

IDEAL WRAPPING MACHINE COMPANY

MIDDLETOWN, NEW YORK, U.S.A.

in the kettle and boil. After they have been processed and rinsed well in hot water, turn them upside down on a rack to dry. When they are dry, smell them to make sure the mats are practically odor free before using.

Rubber candy moulds are especially adaptable for the manufacture of cordial fruit centers, fudges, figaro, cast creams, crystallized creams, maple sugar, creams and some jellies. One can obtain stock pattern moulds which are adapted to fit pump bars with standard centers for various depositors. Moulds manufactured to the customer's specifications involve a set up charge. Money and time can be saved if you design the original mould in plaster of paris previously mentioned.

A confectioner can take a high sugar fondant, and remelt it to a temperature no higher than 165° F. and then add frappe, color, flavor, citric acid and invertase. The cream can be deposited in rubber mats, and, within twenty minutes, the centers can be removed. After the initial set, the candies are demoulded as soon as possible to prevent sweating. The length of time before sweating depends on the amount of moisture and reducing sugars present in the centers. Advantages of using rubber candy moulds in place of starch moulding:

1. Uniformity and symmetry of pieces
 - (a) Eliminate adhering pieces of other centers and grit to the pieces being deposited.
 - (b) Eliminate the possibility of the lack of starch on a board or collapsing of the impressions.
 - (c) Eliminate the breakage and damage to the moulds.
2. More sanitary
 - (a) Remove the possibility of bacterial contamination.
 - (b) Easier to keep the department clean and sanitary. Also eliminate the possibility of a starch explosion.
 - (c) Remove the possibility of foreign materials, such as wood splinters, pieces of pattern moulds in the moulding medium.
3. Space Saver
 - (a) Eliminate the cost of buying and maintaining starch equipment.
 - (b) Eliminate storage area for extra moulding starch.
4. Long Life of Moulds
 - (a) Moulds will last well over 5 years if properly used.
5. Operation of depositors
 - (a) Can operate at a faster rate for the walls of the impressions cannot collapse.
6. Crystallized Creams
 - (a) Reduce the possibility of air blisters on crystallized creams often due to the absorption of starch on the outside of the centers.
7. Levels out peak loads
 - (a) When the load in your starch department is too great, cream casting can be done in another department if you have an extra depositor and rubber mats.

Disadvantages of Rubber Candy Moulds:

1. Initial Cost
 - (a) The original cost is high. This must be taken

into consideration when determining whether or not your investment in moulds will be a cheap method of casting.

2. Not usable for all centers
 - (a) Chocolates, soft marshmallows and caramels cannot be made in rubber mats. Chocolate can be deposited in Neoprene moulds or Silicon rubber moulds, but the high glossy finish is not obtained. Soft marshmallows and caramels would adhere to the rubber. Pectin jellies are not released as readily as one desires.
3. Sweating
 - (a) Centers must be removed when they are set. If this is not done, it becomes very difficult to remove centers without deforming them.
4. Washing
 - (a) As mentioned, new rubber mats must be washed with 3% caustic soda. Make sure no odor remains.
 - (b) Mats must be washed when changing centers from one color or flavor to another.
5. Usage
 - (a) Mats can be used for only one design. The confectioner must be careful when selecting the design because of the consumer acceptance and original investment.

For years now, a great deal of research has been done by the manufacturer of rubber mats on the release of sticky centers and on obtaining high gloss to chocolate. Materials such as silicone and Hypalon (a chlorosulfonated polyethylene) have been tried but so far without too much success.

During the holidays, water moulds are used to make fondant figures, however, the art of making this type of candy is slowly disappearing.

These water moulds, which are made of plaster of paris, are made in two sections. They are immersed in water for a definite length of time and then removed. The excess water is wiped from the impressions and a high sugar fondant which is cooked to approximately 250° F., often slightly grained, is poured into the mould. The surface of the fondant touching the mould gets a shiny appearance and a sugar crust. If long shelf life of the holiday figures is desired, they are crystallized or chocolate coated.

In Europe, this technique is still used by the retailers. Two types of moulds used are the plaster of paris moulds and the dark brown wood moulds. The Netherlands and most of Belgium use the wood moulds while France, Germany and England prefer the plaster of paris moulds.

Different shape creams are also made on a cooling slab. The cream is usually deposited from a funnel into metal forms which do not have a top or a bottom. Many retailers who want an exact width or diameter manufacture creams in this manner.

In this country, some Swedish steel belts, oil cloth belts and rubber belts with or without impressions have been installed onto which creams, mainly thin mints, are deposited, cooled within 15 minutes, and then enrobed. It is remarkable how uniform the centers are. The gossip around the industry indicates that in Europe very thick creams of various sizes cast



*Perfect for
any candy formula*

FOR HARD GOODS...

GLOBE[®] Corn Syrup blends perfectly with your hard-candy ingredients... gives you the correct color and consistency... prevents undesirable color, stickiness and graining from marring your goods.

FOR GUM CANDY...

HUDSON RIVER[®] Corn Starches, made to rigid specifications, promote ideal working qualities on your mogul. These proven starches assure jelling and proper set-up, practically eliminating cripples.

FOR SOFT GOODS...

REX[®] Corn Syrup gives desirable body and controls moisture in your marshmallows and gum work... improves the texture and greatly extends the shelf life of gums and jellies.

FOR MARSHMALLOWS AND CAMELS...

CERELOSE[®] brand dextrose sugar allows a higher sugar concentration without increasing viscosity... controls fermentation and assures better depositing... makes for more tender-eating caramels.

Just give us a call and let our technical staff show you how to get the best results with these superior quality corn products.

CORN PRODUCTS REFINING COMPANY
17 Battery Place, New York 4, N. Y.

Senneff's

Always the Choice of
The Most Discriminating

**Senneff's Quality Ice Cream Toppings Used
By Leading Dispensers**

The Complete Assorted Line

- | | |
|--------------------------|----------------------|
| ★ Marshmallow Topping | ★ Caramel Sundae |
| ★ Milk Chocolate Fudge | ★ Butterscotch |
| ★ Bittersweet Chocolate | ★ Ready-To-Use Fruit |
| ★ Fudge | ★ Syrups |
| ★ Ready-To-Use Chocolate | ★ Flavored Syrup |
| ★ Crushed Fruits | ★ Chocolate Fudge |

**Always popular with Candy Makers
are SENNEFF'S CANDY MAKERS' SUPPLIES**

Year-Round Favorites
with real perfection flavor and add
so much to the taste-appeal of candy.

A Great Selection of Supplies to Suit Your Demand.

Write for Samples and Prices Today.



ALWAYS AT YOUR SERVICE

In Cocoa Since 1899

EMIL PICK CO.
COCOA BROKERS

80 WALL ST.

NEW YORK, N. Y.

BOWLING Green 9-8994

COCOA BEANS - COCOA BUTTER
Cocoa and Chocolate Products

Big Candy names use

HOOTON
CHOCOLATE

COATINGS • LIQUORS • COCOAS

HOOTON CHOCOLATE COMPANY
NEWARK 7, NEW JERSEY

continuously in rubber moulds are also made in this fashion. Machines that will extrude and cut marzipan in different shapes are available.

HARD CANDY MOULDS

The moulds are generally manufactured by a casting process. Hard candy moulds can be made from cast iron, cast aluminum or spelter. These metals are used for they dissipate the heat without difficulty, make a rigid mould and will take rough handling. If the heat is not removed quickly, the candy will stick to the moulds and the candy will darken. The moulds must be lubricated with a very stable vegetable oil before moulding candy toys. Many have tried to coat the moulds with silicon or teflon for release. These coatings will act as insulators and will often peel.

Around Christmas, many of us have bought for our children sets for moulding plaster of paris. The moulds are made of latex and will not stand heat or fats and oils. Borrow a mould and fill it with hard candy cooled to a temperature of 250° F. The result will be a very interesting image with deep undercuts made with a one piece mould. If this is of any value to you, I would recommend you have a rubber mould manufacturer make you a few moulds from flexible neoprene for it is quite resistant to fats, oils and heat.

Hard candy can also be moulded in heat resistant plastics. However, moulds of this type would not be feasible for as yet they do not have a long life and the plastic acts as insulation.

Hard candy is generally moulded by placing the candy in the plastic state under pressure rolls with cavities or cutters to form definite designs. Tablets, lollipops, huggers, peanut butter puffs, etc. are made in this manner.

Hard candy toys are made with sugar and cream of tartar, or 90% sugar and 10% corn syrup, or 85% sugar and 15% invert sugar cooked to 310-320° F. The cooked material is handled very carefully and poured into moulds or into a mould filling machine and then into moulds.

Many concerns today have continuous hard candy cookers for regular production. Sugar 60 to 65% and corn syrup 35 to 40% are suitable formulae for efficient production on this type machine.

In 1904, at Washington Park in Philadelphia, people used to pay a nickel to see the glass eaters. The fakers would hold up two hard candy bottles, let them drop and then eat the supposed-to-be glass.

CHOCOLATE MOULDS

The confectioner moulds chocolate in fancy moulds, pan moulds, book moulds and shell plant moulds.

Easter, Christmas and other fancy moulds are generally drawn from cold rolled steel because excellent definition of a figure can be obtained. Other materials would not for the most part stand the deep drawing process without cracking. Cast steel moulds are also known to be used for novelty items and the moulding surface is usually coated with high gloss enamel paint or teflon. Both these coatings cut down tremendously on the heat transfer.

Weighed amounts of slightly tempered chocolate are placed into fancy metal moulds which are put into a basket on a tumbler machine. The chocolate spreads

over the
ment in
the mou
wheel at

Plastic
gaining
novelties
moulds
handling

In the
plated v
type are
good fin
metals u

Book
from m
Plastic
cess. W
or solid
The ch
until set

Conti
ity and
plant op
metal m
the fram
is the ty
with a
frame. C

out with
steel fr
nickel p
tin. Nic
well an
readily
ically, c
on a use
adhered
in the c
the imp
manufa
usually
nickel i
quite p
or silico

Nick
can als
moulds

For the

FA

They l

...Fleis
expe
"pic

...you
pear
unif

for Jun

over the mould and becomes tempered by the movement in the tumbler. It is cooled and removed from the mould. The machine makes one think of a ferris wheel at Coney Island.

Plastic moulds made from tasteless polystyrene are gaining acceptance by the candy maker for making novelties. Tempered chocolate is placed in plastic moulds and cooled for they will not take the rough handling in the tumbler machine.

In the manufacture of large pan moulds, steel is plated with tin. Advantages of using a mould of this type are: the chocolate will release readily with a good finish, deep drawing qualities and strength of the metals used and the cost is low.

Book moulds or solid chocolate moulds are made from metals such as nickel on steel or tin on steel. Plastic book moulds have been tried but without success. When using either the pan moulds, book moulds or solid chocolate moulds, tempered chocolate is used. The chocolate is deposited into the moulds, cooled until set and then knocked out.

Continental type chocolates are gaining in popularity and many candy manufacturers are setting up shell plant operations. The design of a complete shell plant metal mould can vary but the mould itself basically is the frame type or the insert type. The frame type is the type in which the impressions are stamped out with a flange and the flange is soldered to the steel frame. On the insert type, the impressions are stamped out without a flange and the insert is soldered to the steel frame. These moulds are usually made from nickel plated steel and the steel frames are coated with tin. Nickel plated steel is well accepted for it draws well and imparts a fine luster to the chocolate and readily submits to the soldering method. Microscopically, one can sometimes find a deficiency of nickel on a used mould at various points where chocolate has adhered. The abnormality may be caused by the acid in the centers, or scratching the moulding surface of the impressions, or by the drawing of the metal in the manufacture of the moulds. In these areas, rust is usually found. To have the moulds replated with nickel is nearly as expensive as the mould itself. It is quite possible to have the mould coated with teflon or silicone.

Nickel silver (German Silver), monel, and stainless can also be used in the manufacture of shell plant moulds.

German silver consists of copper, zinc, and nickel. This material is rust proof, draws well, solders well, is inclined to turn green, therefore, necessitates keeping moulds clean at all times and does not give the sheen.

Monel consists of 67% nickel, 28% copper and other metals. The material draws fairly well, solders nicely but the finish is not too good and it is fairly expensive.

Stainless steel is an alloy of chromium and steel. It is rust proof and is very sanitary. However, it tends to perspire in the continuous cooling and heating process during the usual moulding procedure, does not give the finish to chocolate as does the nickel steel mould, is difficult to stamp intricate designs and is very expensive.

The metals, silver and copper, have extremely high thermal conductivity. Is it possible to have a mould

"BUSH" Manufacturing Chemists

Since 1851 we have specialized in the distillation of Essential Oils and the manufacture of Flavoring Materials and Food Colors, and over this long period have established and maintained a world-wide reputation for Quality.

Please Note NEW ADDRESS



W. J. BUSH & CO., Inc.
137 Boston Post Road
COS COB, CONNECTICUT

TEL. GREENWICH (CONN.) 8-8363 OR DIAL WESTMORE 7-3424

FACTORIES: LINDEN, N.J. and
3525 E. Olympic Blvd., LOS ANGELES 23, CAL.
BRANCH OFFICE & WAREHOUSE: 605 W. Washington Blvd.,
CHICAGO 6, ILL.

INSTEAD OF

W. J. BUSH & CO., Inc.
19 W. 44th St., NEW YORK, N. Y.

For the very best, use . . .

FLEISCHMANN'S

FANCY PECANS

They look better

...Fleischmann's buyers have the experience needed to buy up the "pick" of the pecan crops.

...you get true fancy quality in appearance, color, character and uniform grading!

They stay fresher

...Fleischmann's policy of all-year-round shelling and frequent direct deliveries means the pecans are fresher when you get them!

**When it comes to quality pecans—
Fleischmann is First**

Fleischmann's Fancy Pecans
Standard Brands Incorporated
595 Madison Avenue, N. Y. C. 22, N. Y.

Gentlemen:

I would like to learn more about the advantages of using Fleischmann's Fancy Pecans. Please have your representative call.

Name _____

Address _____

Firm _____

City and State _____

made from copper and plated with silver? A study would have to be made to determine if the savings due to the thermal conductivity and the finish of chocolate would over-shadow the softness and the tensile strength of the mould and the initial cost. It is definitely worth considering.

Metal moulds should seldom be washed. When new moulds are first received, they should be filled with cocoa butter. If they are stored for any length of time, they should not be washed, but they should be wiped and covered. When put back into use, moulds can be washed and then immediately treated the same as new moulds.

Plastic moulds are used for moulding small items no more than $\frac{1}{8}$ " high, such as coffee beans, wafers, hearts, etc. The cheap cost, ease of handling, rust proof, storage and transparency of moulds are some of the advantages of this type. The disadvantages of plastic moulds are: the material is an insulator, will chip and break quite easily if cooled to a very low temperature, does not give as good a finish to chocolate as metal and does not have as long a life as that of a metal mould. A plastic cherry mould is an excellent research tool for studying cordialization, freezing of candy and color changes in creams such as coconut creams. Under controlled conditions anyone can determine the effects a certain quantity of invertase, acid, moisture and various formulae have on liquefaction of cordial fruits. Many of the younger generation in the candy industry have doubted the old technique of turning a case of cordial cherries upside down at a definite interval of time in order to speed liquefaction. Well, from our testing, it is so. You can also see the dextrose formation and separation after the cordialization is complete.

One word of caution, it is to be remembered that the cordial fruit in a plastic mould will completely liquefy faster than a cordial completely covered with chocolate. A corrective factor must be determined for your storage and testing conditions. When one looks at chocolate under a microscope, he will find it quite porous. Thus the latent heat of the center is partly removed and the centers can lose moisture. These factors help slow down cordialization.

The mould manufacturer knows what material is best suited for each particular job. He will take into consideration the drawing of the moulds, soldering, die expense, application, luster required and the cost. Give him complete information and you will get a job well done.

Tempered chocolate is deposited into shell plant moulds the same as in pan moulds and book moulds. The shell plant moulds are usually heated to 80-85° F. before they are filled. A vibrator removes the air bubbles. The moulds are inverted and the excess chocolate is drained. While the chocolate is still plastic, the moulds are turned over to their original position and the rough ends are removed by hand or by a scraper. The chocolate shell is again cooled and a filling (90-95°F.) is deposited into it. After the filling has crusted over, the mould is passed under a heater to soften the chocolate edges and to insure a tight bond between wall and shell. Tempered chocolate is then deposited into each impression. Excess chocolate

is removed by a scraper and the mould is vibrated gently to remove air bubbles in the bottom. The moulds are cooled in a cooling tunnel and then the centers are knocked out either by hand or by machine. The moulds are then returned to a mould heater for processing.

Let's look into a crystal ball. With improved and new raw materials, better techniques, more efficient equipment automation, group research, cooperation and coordination of all, nothing is impossible.

In the past twenty years, some of the ideas we thought impossible have laid a golden egg. Mylar is a package film which has the tensile strength of 23,500 psi, it resists high and low temperatures, resists attack by fungi, is non-toxic and is a wonderful shipping material. It has been claimed that a piece of mylar .003" thick will pick up a two and three-quarter ton automobile.

Look at the drastic changes in making marshmallow, caramels and jellies continuously. Machines are also available for depositing centers directly onto enrober belts.

In the metal industry, spraying molten metals is becoming very efficient. In our maintenance shops, many of the worn shafts and bearings of pumps are often repaired by this technique. If the brittleness of the sprayed metal can be eliminated, the mould manufacturers will be able to make moulds of this type with metal of a high heat conductivity at a very reasonable price.

It is also possible to make your own moulds as is being done in Europe and Australia. Imagine, instead of using a metal mould in a shell plant, use a piece of aluminum foil shaped as a regular mould. The Continental type center would be deposited in the foil. After the bottom to the center was put on and had set, the foil in contact with the center would be cut and the piece would be wrapped in the same foil.

The past year, a chocolate Easter novelty was deposited in plastic. It was not demoulded by the manufacturer; the consumer did the demoulding. What labor saving and what merchandising!

I often listen to many neophytes, being one myself, talking about the backwardness of candy manufacturing. If the confectionery industry improves as it has in the last decade, we can be sure within the next ten years that the operation will be as efficient as the highly rated chemical industry producing high quality merchandise.

Walter H. Kansteiner Company

Raw Material Brokers

1737 W. Howard Street, Chicago 26, Illinois

Bachman Chocolate Manufacturing Co.—Chocolate

R. E. Funsten Company—Pecans, Black Walnuts

Lever Bros.—Shortening—Vegetable Oils

Petran Products Corporation—Vanilla

Western Condensing Co.—U. S. Extra Grade Dairy

Why

*The Confidence of the Purchaser is in the Integrity of the Seller
... Our Greatest Asset.*

THE MANUFACTURING CONFECTIONER

READING: a business man's tool

CHAPTER SIX *Different Patterns of Writing*

by NILA BANTON SMITH

When an author writes an article or chapter he has a purpose in mind for conveying his thoughts to others. This purpose governs the pattern of writing which he employs. The most common patterns are those in which the author desires to: (1) share an experience, (2) impart information, (3) express his opinion together with his reasons, (4) state a question and give the answer, (5) draw a conclusion and substantiate it with facts.

When you are about to read a selection you should decide which pattern the author used in writing the selection, and then adjust your reading to this pattern. If you "ride in the saddle" with the author your reading journey will be much more swift and sure.

SHARING-EXPERIENCE PATTERN

Perhaps the pattern most frequently met is the one in which the author wishes to tell about some personal experience which he has had. This experience is so interesting, novel or worthwhile in the opinion of the writer that he would like to share it with others.

It is easy to identify the sharing-experience pattern. Simply answer this question to your satisfaction: "Is he telling about some actual, first-hand experience which he has had?"

Not only is the sharing-experience pattern easy to identify but it is also easy to read. When you start such a selection, you may know that it is safe to proceed at the highest speed which you can command. Usually comprehension difficulties are at their minimum in such articles.

THE QUESTION-ANSWER PATTERN

The Question-Answer pattern, as the name implies, is one in which the author states a question, then proceeds to answer it. The question may be stated as the title of an article, as a sub-heading within the article, or at the beginning of a paragraph.

The question-answer style can be used in writing technical material but usually it isn't. It more often appears as an "interest tickler" in more or less popular types of writing.

The author may make one of two uses of the question-answer technique in his writing. He may use the question to excite curiosity so that you will be interested in reading what he has to say. On the other hand he may use this technique in order to indicate his intentions to you in a concise and clear-cut form. This "sharpening" up of the subject by couching it in the form of a question, may be his way of letting you know directly what he plans to "talk about," thus saving you the trouble of reading through several lines of print to find out.

The question-answer pattern has many advantages for the reader. For one thing, it states the reader's purpose for him; he doesn't have to formulate his own motive for reading the article.

A second advantage of this pattern is that it is easier to hold a question in mind while reading than a topic sentence. The question seems to stand out sharply in one's consciousness throughout the reading of the text that follows.

The question-answer pattern also facilitates speed. If the content is of such a nature that you don't care about the details, simply read the question, glance through the text until you find the answer—and let it go at that.

IMPARTING-INFORMATION PATTERN

The "Imparting-Information" pattern is also easy to identify but often difficult to read. Frequently this pattern contains many factual details. If you wish to remember these details then you must use the very careful techniques in the preceding chapter. One quick glance at a selection will usually tell you if the author's purpose in writing it was to give the reader information. If so, prepare to look for main topics, larger sub-ideas, and the cluster of smaller ideas that belong to the main topic or to each sub-topic, if there are such. You must be prepared to adjust your speed to careful, detailed reading.

THE OPINION-REASON PATTERN

The opinion-reason pattern is, as its name implies, the pattern in which the writer states an opinion and gives his reason or reasons for this opinion. You may have to read two or three paragraphs before you can determine whether the author is expressing his opinion and also if he intends to give reasons supporting his opinion. You need to get a concise understanding of what the author's opinion is, then read to find his reason or reasons for believing as he does.

THE SUBSTANTIATED-FACTS PATTERN

This pattern usually begins with a conclusion and is followed by facts which prove that this conclusion is true. It is most frequently found in technical or scientific content, although one occasionally runs across it in a popular article. This is the most convincing type of pattern which an author can use in making his point.

In identifying this pattern, look for a definite statement in the form of a conclusion. It usually is a terse statement of fact. The series of statements which follow the conclusion offer substantiation in the form of data, scientific observations, experiments, or quotations.

This pattern usually must be read carefully and, at

a change in speed if you have been reading the experience pattern or question-and-answer type of material just preceding the new article. The proofs to the conclusion are detailed and the meaning of every word must be grasped in order to understand the evidence which is presented. The conclusion stated by the author will of course be the topic sentence, and all of the subsequent proving sentences will be related to this statement as reinforcing details. When you are about to read this pattern of writing, make certain that you comprehend the significance of the author's conclusion—and then challenge him mentally to prove it to you.

APPLYING WHAT YOU HAVE LEARNED

You will now be given several paragraphs to read. There will be one or more selections which represent each of the patterns discussed in this chapter.

The selections are assembled in two groups in order that you may obtain a check of your rate in reading two different types of material: easy, non-technical material and detailed, factual material.

PRACTICE SECTION I

In this section you will find paragraphs representing some of the different patterns of writing. All five of these selections are easy to read. Your test at the end will check your identification of the pattern represented in each selection, and it will also include one general comprehension question on each selection. You will also be checked on your rate, based on the total time it takes you to read all five paragraphs.

As you start to read each selection, quickly identify the pattern of writing which the author used, and synchronize your reading pattern with the author's writing pattern. This will contribute much both to your speed and comprehension.

Time begun _____

SELECTION NO. 1

No Hollywood Star could be as temperamental, as hilarious, as touching or as frightening as some of the actors that have performed their roles before my camera.

As a member of the Walt Disney wildlife camera crew, I spent two seasons filming the spectacular true-life adventure, *The Vanishing Prairie*. We followed and found our animal and bird actors in remote sections of the West—in the last retreats of the native wildlife of the Great Plains.

This was my greatest camera adventure.

My "actors" were unpredictable. They misbehaved continually. Small ones disappeared down burrows just when I was ready to start my camera. Of course they ran from me whenever I inadvertently revealed myself. They hid from me much more easily than I from them. Larger ones often charged me angrily when I got too close.

Yet all this was to be expected.

The story for this film was their story—the everyday adventures of the animals and birds of the vast American prairie. They wrote the script with nature as their director. My camera was merely the "invisible" intruder.

SELECTION NO. 2

Why, then, do doctors prescribe, and parents often demand the expensive formulations put out under the fancy labels? For the doctor, it is often the easy way out: the formula pad is handy, the infant is doing well under its hospital-prescribed mixture, and the parents will be satisfied to continue the "official" routine the hospital started. For the parents, the expensive product with the fancy label gives the satisfaction that they are not stinting, but giving their new child "the best."

But there are signs of change. Some hospitals have started to use sugar and milk—any brand—and to forego the free offers of the companies. Some pediatricians are following the same progressive technique. And some parents, even some whose babies started out on traditional and expensive formulas, are asking questions of their doctors, and beginning to realize that the most expensive course is not necessarily the best one.

SELECTION NO. 3

The tropical rainstorm had stopped as suddenly as it had begun. Long shafts of yellow sunlight were lancing down through the dripping trees as I stepped from the porch of the trading station at Sietevaca, a tiny native village in eastern Honduras. At the end of the long boardwalk that stretched out into the murky, sullen water of the Patuca River a half dozen curious Hondurans were assembled to watch the rapid approach of a huge pitpan, or native dugout canoe.

Under normal conditions, the arrival of one cargo canoe would have been no cause for interest. But this pitpan was not filled with cargo. There were three men in the boat. One of them was lying motionless in the bottom, and the other two were excitedly calling to the onlookers to find the doctor. Stepping back up to the door, I called to Doc McQuartney, the only man within a radius of fifty miles who was qualified to call himself a physician, and waited while he heaved his ponderous bulk out of the wicker chair and lumbered toward the door.

SELECTION NO. 4

What can be done about emotionally caused overeating?

To break the conditioned reflex of eating under stress, you must first recognize the wide prevalence of emotional conflict. Everyone has weaknesses, though we express them differently. Some people lose their appetite under stress; others overeat. Still others take to alcohol, or develop stomach pains, diarrhea, cardiac palpitation or migraine headaches.

Breaking food reflexes must start with a conscious, deliberate setting up of *different* reflexes. This takes time. A few days or weeks of dieting is not enough. Be prepared to allow months for the job, because only then can results become permanent.

Overeating is a habit. It can be broken, like all habits, by the substitution of other routines. Once you remove the need for overeating through self-understanding and tolerance, you can give yourself the motivation to carry through to a permanent goal.

ten
the
way
ing
ar-
ine
ive
hat
the

ave
re-
ans
and
on
ies-
the
ne.

r al
were
ped
a, a
d of
rky,
ous
ap-
e.

argo
this
men
the
g to
p to
man
call
his
ered

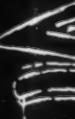
ver

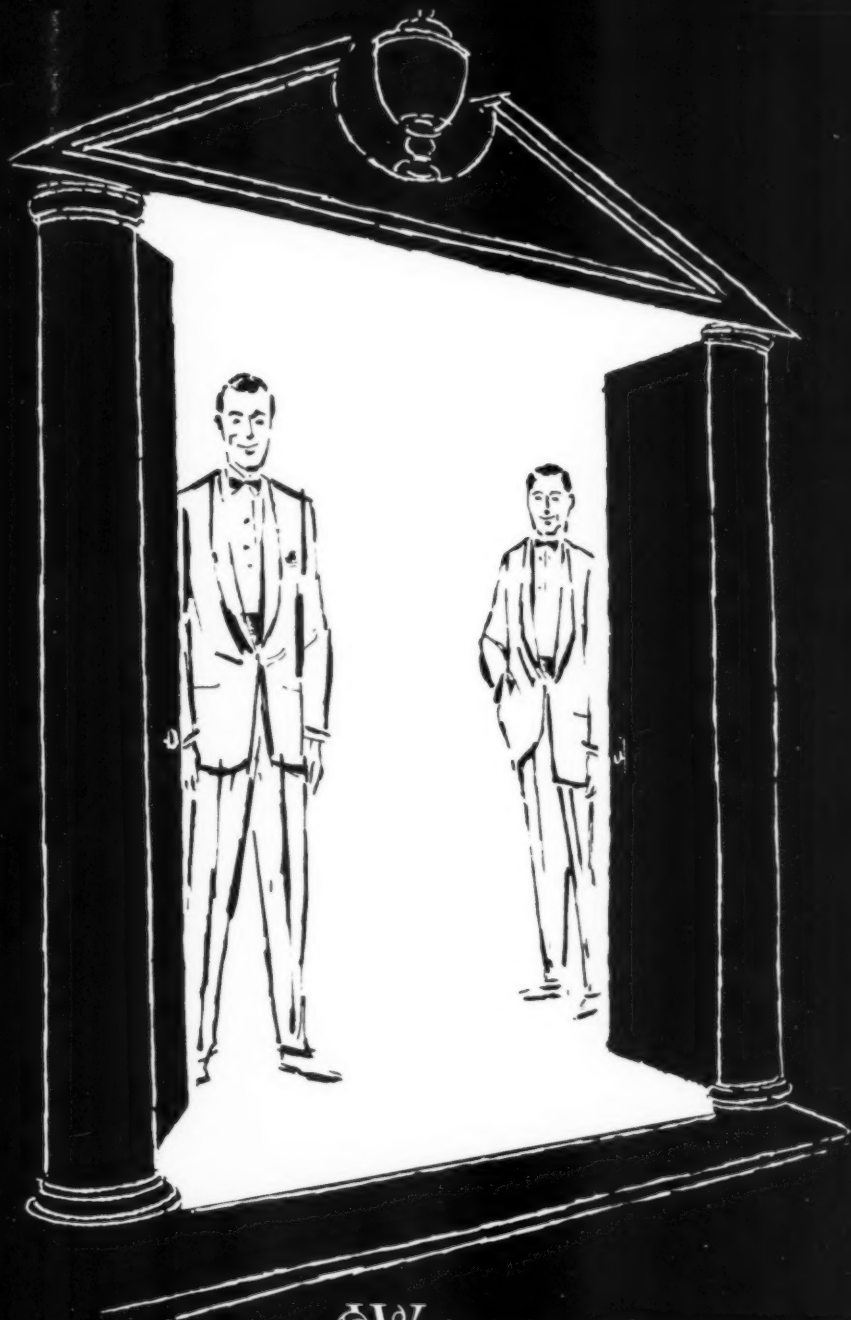
nder
e of
ugh
their
take
diac

ous.
akes
ugh
only

e all
you
der-
noti-

ONER





We look forward to seeing you at the NCA convention
in Boston. Visit our booth #91 at
Mechanics Hall; visit with us in our hospitality suite
at the Statler. We will enjoy seeing you.

**AMERICAN MAIZE
PRODUCTS COMPANY**

*SERVING THE CONFECTIONARY INDUSTRY FOR
50 YEARS WITH QUALITY PRODUCTS FROM CORN*

ATLANTA • BOSTON • BROOKLYN • BUFFALO • CHICAGO • DENVER • FORT WORTH • GRAND RAPIDS • LOS ANGELES
MEMPHIS • PHILADELPHIA • PITTSBURGH • PORTLAND • ST. LOUIS • ST. PAUL • SAN FRANCISCO • SEATTLE

SELECTION NO. 5

What is the reason for the existence of this great glacial system on this mountain? It is not simply the altitude of Mount Rainier for there are other mountains which are slightly higher above the level of the sea. Both Mount Whitney in California and Mount Elbert in Colorado may boast of greater elevation but neither possesses glacial systems. The reason is snow. Upon the broad flanks of this huge volcano, due to the great amount of moisture that is swept inland from the Pacific in the prevailing winds, occurs one of the heaviest snowfalls on record in our country. At Paradise Valley (5557 feet), which is widely known for its wild flowers during the summer season, it is not unusual for twenty-five feet of snow to be found upon the ground in mid-winter, while unquestionably a great deal more snow falls at the higher levels where most of the glaciers are born. This snow, in packing down is transformed into glacial ice and keeps alive these remnants of the "ice age." Each winter it partly repairs the damage of the warm summer sun but the glaciers are fighting a losing battle. Eventually, perhaps, at some time in the distant future these great glaciers, some of which are more than four or five miles long today, may be mere traces of their former magnificence.

Time Ended _____

CHECKING YOUR SPEED

Record your total time in the table below. Find your rate of reading by referring to the scale. Record your rate on the appropriate space in the table.

Total reading time for the five paragraphs:	
Reading rate	:
Comprehension score	:

Below is a table for your reference in determining your rate of reading.

Minutes	7%	7	6%	6	5%	5	4%
WPM	126	135	145	157	172	188	209
Minutes	4	3%	3	2%	2	1%	1
WPM	238	270	315	377	472	629	944

CHECKING YOUR COMPREHENSION

Write a brief answer to each question. You may refer back to the selections in answering the first five questions about patterns, but not while answering the last five questions which check comprehension of content.

1. What pattern of writing was used in Selection No. 1? _____
2. What pattern was used in Selection No. 2? _____
3. What pattern was used in Selection No. 3? _____
4. What pattern was used in Selection No. 4? _____
5. What pattern was used in Selection No. 5? _____
6. The photographing of animals was discussed in one selection. Where was this photography done? _____

7. In one selection "formulas" are discussed. What kind of formulas are under consideration in this article? _____
8. What was the object of excitement in the selection with a setting in Honduras? _____
9. Overeating was discussed in one selection. What is the cause of overeating? _____
10. The glacial system on Mount Rainier was discussed. What is the reason why this glacier system exists? _____

KEY

1. Relating Experience remote Sections of the West
2. Question-Answer
3. Relating Experience
4. Question-Answer
5. Question-Answer
6. The Great Plains or
7. Baby food formulas
8. A man lying in the bottom of a pitpan
9. Emotional stress
10. Heavy snowfall

Allow yourself a score of 10 for each correct answer.

PRACTICE SECTION II

In this section you will also have practice in reading selections which represent different patterns of writing. These, as a whole, are of the detailed factual type. You will therefore need to read them at a slower rate than you used in reading the easier material in the preceding Practice Section.

You will be checked on the pattern of writing which each selection represents and also on some detail in each selection. In addition, you will have an opportunity to check your speed in reading this type of material.

When you are ready to start, jot down your beginning time and when you have finished reading all five selections record your ending time.

Identify the pattern of writing in each selection and "read to the pattern." Force your speed as much as you can and still grasp the details. Don't feel frustrated, however, because you cannot read with such a high speed as in the preceding section. This is detailed reading and you will have to "shift gears."

Beginning time _____

SELECTION NO. 1

Improvement in machines has been the result of many factors, one of which has been the rapid advance in the science of metallurgy. There are now some 5000 different metal alloys, some of them much better than the metals formerly used. It has been claimed that the steel produced today wears nearly twice as long as most of the steel made fifty years ago. The advance has been phenomenal in some of the hard cutting metals. A new material is now available which consists of a mixture of tungsten and titanium carbides cemented with cobalt. This is perfectly satisfactory for cutting steel and it has been found to have 60 times the life in operation that the original cemented tungsten carbide had. Through chromium plating the life of various tools and parts has been extended from 3 to 20 times. By the use of tungsten

Visit Booths 50-51-52-53-54

N.C.A. Confectionery Exposition

June 11-14 Mechanics Hall, Boston

New Candy Equipment Developments To Be Exhibited and Power Demonstrated

- Short Case Sealer
- Continuous Vacuum Cooker
- Bon Bon Enrober
- Mechanical Batch Mixer
- Automatic Cherry Dropper
- Hydro-Seal Pump Bars
- Speed Wrap

National Equipment—Manufacturers of the Most Complete Line of Candy Machinery

STARCH DEPARTMENT

Model M-100 Mogul
Model D-100 Depositor
Steel Starch Buck
Hydro-Seal Pump Bars
Cherry Dropper
Continuous Cream Cooler and Beater
Sugar Sander

CHOCOLATE MAKING DEPARTMENT

Disc Process for Coating
Chocolate Depositor
Peanut Blancher
Peanut Butter Grinding and Emulsifying Equipment

HARD CANDY DEPARTMENT

Continuous Cooker
Batch Mixer

CHOCOLATE DIPPING DEPARTMENT

Enrober (16", 24", 34", 42" sizes)
Two Color (Two Division) Enrober
Bon Bon Enrober
Automatic Thin Mint Unit
Cooler and Packer
Multiple Tier Cooler and Packer
Continuous Automatic Tempering Units (1, 3 and 5 column)
Chocolate Melting Kettles
Kihlgren Decorator
Automatic Decorator

WRAPPING DEPARTMENT

Short Case Sealer
Overwrap Machine
Speed Wrap

Orders placed now will be delivered in time to meet your fall 1956 production requirements.



NATIONAL EQUIPMENT CORPORATION

153-157 Crosby Street
New York 12, New York

carbide, carboloy tools have been formed which operate in some cases 300 to 400 times as efficiently as the old steel tools. On a brass-plug job the number of finished pieces produced by old tools was 200; through the substitution of carboloy tools this was increased to 15,000. Great improvements have been made in some articles through the use of the lighter metals and alloys, some of which are extremely strong as well as light. Scientists say that we are entering a new era in which steel will to some extent be displaced by these materials.

SELECTION NO. 2

Let me state at once my theme and my deep personal conviction: that, by not lifting the Language Curtain which she has lowered on her shores since the time of World War I, America persists in imperiling her international commitments and weakening her influence as a promoter of world peace and understanding. By indulging our linguistic and cultural isolationism long after we have abandoned political isolationism, we seem to others a nation of good intentions paving the road to an atomic hell. I am using the phrase "Language Curtain" deliberately to invite comparison with another, more familiar and more metallic screen. Is it pure coincidence, one of the forgivable synchronisms, that the rise of the Soviet Union and the decline of foreign language study in this country began at precisely the same moment in history and have continued to do global damage together? This sounds like a charge of "guilt by association" against those responsible for the decline of foreign languages, but I reject the inference. It would be more accurate to call it guilt by disassociation. Or going to another, equally unfortunate, extreme. There have been too many Americans whose smug answer to the problems of a shrinking, suspicion-ridden world has been "Let 'em learn English!"

SELECTION NO. 3

The rare 1913 nickel is not the Buffalo type but is the Liberty head type. Shortly after their coining (only six were made), a then well known coin dealer was detailed by the late Colonel Green to approach the mint regarding the sale. After negotiating for a short time, four of the six 1913 Liberty head nickels were sold to him for \$500 each, \$2000 for the four. All were in brilliant uncirculated condition, and the fifth was kept for the United States Mint collection. No one knows what became of the sixth nickel, and this mysterious nickel is probably the reason so many non coin collectors have been acquainted with the rarity of the 1913 Liberty nickel.

For years a well known dealer advertised very extensively throughout the United States that he would pay \$50 for a 1913 Liberty head nickel but this coin has never been found and probably never will be. The chances of anyone finding it are practically nil for we must remember that the average life of a nickel in circulation is not over twenty years. There have been hundreds of millions of nickels coined since 1913, and millions are in circulation all of the time. Our population is in excess of 160,000,000 people, anyone of whom might have that poor nickel,

so you can figure what odds there are against your ever finding it, or its still being in existence.

SELECTION NO. 4

Only an all-out war against the virus itself, if successful, would eradicate colds. Medical science now has a new weapon which could accomplish this.

"Ultraviolet 2537" has already been used in hospitals, clinics and other institutions, where it has proved itself an efficient germ killer. At the University of Toronto's Hospital for Sick Children, twice as many children suffered infections where the lamps were not installed as where the lamps were used. At the U. S. Naval Training Center, Sampson, N. Y. respiratory diseases, including colds, were reduced by one-fourth by installing the lamps in the sleeping quarters, although mess halls and class rooms were unprotected. The Cradle Society, Evanston, Ill., reported a 90% reduction in the spread of upper respiratory infection among infants in cubicles equipped with "2537" as compared with those in untreated cubicles.

SELECTION NO. 5

When I speak of freedom, I believe that I approach a subject which is of interest to you not only in general but which must be definitely in your minds as you approach the matter of security, for I presume that we should all be ready to admit that the person who is truly free in this world is the most secure. He has the needed flexibility; he does not need to become a slave of any particular age and therefore unable to meet the revolutionary changes which inevitably come as we move from age to age.

Do you recall that in the passage on the grand inquisitor in Dostoevski's *Brothers Karamozoff* he says, "I tell thee that man is tormented by no greater anxiety than to find someone quickly to whom he can hand over that gift of freedom with which he, ill-gated creature, is born"

Ending Time _____

CHECKING YOUR SPEED

Write your total time in the table below. Then determine your rate by referring to the scale, and write that in the table, also.

Total time for reading the five paragraphs: _____

Reading rate _____ :

Comprehension score _____ :

Rate Table								
Minutes	8%	8	7%	7	6%	6	5%	5
WPM	129	137	146	157	169	183	200	220
Minutes	4%	4	3%	3	2%	2	1%	1
WPM	244	275	314	366	440	555	773	1100

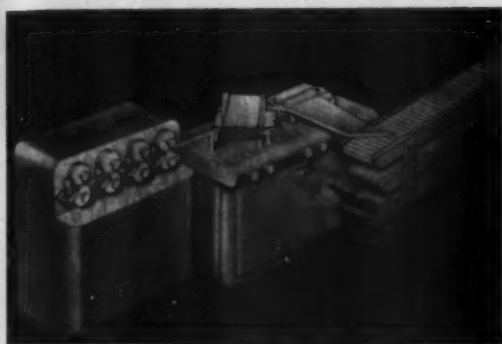
CHECKING YOUR COMPREHENSION

Write a brief answer to each question.

You may refer back to the selections in answering the first five questions about patterns, but not in answering the last five questions.

1. What pattern was represented in Selection No. 1?

M. F. P. STICK-MASTER



A MODERN APPROACH TO STICK CANDY MAKING

New Style — Twister, Cutter & Straightener.

Flexible — 5/16" to 1" diameter and 4" to 10" long.

Productive — up to 1200 inches per minute.

Sanitary — stainless steel finish — candy always in sight.

TWISTER blends the new with the best of the old. Two diagonally running Neoprene belts roll the candy rope as the twist is put in. Results are comparable to table work. Perfect roundness without breakdown of pulled section.

CUTTER is new tool! Synchronized to move forward at the same rate as candy. The specially-shaped knives tuck in the ends. No sharp edges to chip and trouble your wrapper.

Also available is a diagonal cutter for canes.

STICK STRAIGHTENER treats each stick individually. Straightness pays off in your wrapper.

SIZER is particularly designed to go with the Stick-master—same finish, same positive gear-head drive. Sizing rollers are electrically-heated.

COOLING CONVEYOR is available utilizing Neoprene conveyor belts and oversized blowers. Designed to take full advantage of the Stick-Master.

SANITARY—Attractively finished in stainless steel. Easy to keep clean. All parts are fully accessible through large panels.

The candy is always in full view.

Representative:

John Sheffman, Inc.

152 West 42 Street, New York 36, N. Y.

2. What pattern was represented in Selection No. 2?
3. What pattern was represented in Selection No. 3?
4. What pattern was represented in Selection No. 4?
5. What pattern was represented in Selection No. 5?
6. How many different metal alloys are there now?
7. According to one of the articles, the decline of foreign language in this country began at the same time in history as a certain foreign development. What was this foreign development? _____
8. What is the date and name of the nickel which is so rare? _____
9. The effectiveness of "Ultraviolet 2537" was reported from three centers:
University of Toronto's Hospital, U. S. Naval Training Center, in Sampson N. Y., and where else? Name the institution and its location. _____
10. Can you complete this sentence? "...the person who is truly free in this world is the most _____"

KEY

- | | |
|-----------------------|---------------------------|
| 1. Substantiated-fact | 10. Secure |
| 2. Opinion-reason | 9. Cradle Society, Evans- |
| 3. Information | 8. 1913 Liberty Nickel |
| 4. Substantiated-fact | 7. Rise of Soviet-Union |
| 5. Opinion-reason | 6. 5,000 |

Allow yourself a score of 10 for each completely correct answer. In questions 8 and 9 you may allow yourself a score of 5 in each case, if you had half of the answer correct.

Record your score in the table above.

Compare your rate for reading easy, narrative material with that in reading detailed, factual material. Is the latter rate slower than the former? If so that is what you should expect. You should, however, show an increase in speed in reading both types of content.

FOLLOW-UP PRACTICE

Continue with your regular practice periods each evening. Devote some of your practice time to improving your speed and comprehension in reading non-technical material and part of it to improving your ability to read and recall detailed facts. Keep a record of your speed and comprehension in reading both types of material.

In all the reading that you do during the day, continue to apply the techniques that you have learned up to this point, including the new technique of identifying patterns of writing. As soon as you pick up something to read, decide upon the pattern, then read in accordance with the author's design. The continuous application of this technique to every situation should contribute much to the ease and effectiveness of your skill in reading all types of material.



The MANUFACTURING CONFECTIONER'S

Clearing House



MACHINERY FOR SALE

FOR SALE

Model S #3 Savage Fire Mixers.
50 gal. Model F-6 Savage Tilting Mixers, stainless kettle.
200 lb. Savage Flat Top Marshmallow Beaters.
Friend Bostonian Model and Merrow Cut-Rol Cream Center Machines.
50" two cylinder Werner Beater.
1000 lb. Werner Syrup Cooler.
200 lb. to 2000 lb. Chocolate Melters.
Simplex Gas Vacuum Cooker.
Simplex Steam Vacuum Cooker.
600 lb. Continuous Vacuum Cooker.
Form 3 and Form 6 Hildreth and Factory Model American Pullers.
6" and 7" York Batch Rollers.
National Model AB Steel Mogul.
National Wood Starch Buck.
38" Copper Revolving Pans.
Ball and Dayton Cream Beaters.
100 gal. Copper Mixing Kettle with Double Action Agitator.
We guarantee completely rebuilt.

SAVAGE BROS. CO.
2636 Gladys Ave. Chicago 12, Ill.

FOR SALE: Center Depositor, hand roll type, 20,000 centers per hour, latest model, stainless steel. Like new. Used less than month. 5 Ft. F & B Type Cream Beater, with 5 H. P. Motor, Capacity 300 pounds, First Class Condition. Mills Hand Drop Machine. Mills Gas Batch Warmer. Nut Cooker. 105 Pounds Powdered Licorice Flavor. 217 Pounds Powdered Gelatin. A. E. Cramer, Barbara Fritchie Shoppes, Frederick, Md.

FOR SALE: 2-No. 2 Springfield Depositors with assortment of pump bars, 1-High Speed Rose Twist wrapping machine No. 500 which will wrap a piece 1-1/4 x 1/2 round, 1 EP Sucker Machine with conveyor and 3 sets of rollers, 1 35-gallon Savage Tilting Kettle with motor attached for 120 lb. pressure. Box 364 The MANUFACTURING CONFECTIONER.

FOR SALE: 1 32" National Enrober with 24" Sisco Nut Roller. 4-Peerless Plastic Machines with 1 die each. 6-York Batch Rollers. 2-Old type Hanscella Batch Rollers. 2-1000 lb. National Chocolate Kettles. 1-800 lb. Duplex Chocolate Kettle. 1-Hudson Sharpe Wrapping Machine with electric eye. 1-2 Barrel Reade Dough Mixer. 1-Hohberger Continuous Cooker. 1-10 HP Mears Kane Steam Boiler. Box 1052. The MANUFACTURING CONFECTIONER.

MACHINERY FOR SALE

FOR SALE: 1-Hobart Beater Model C-10, 1/2 H.P. Motor. 1-Blower 7x18" Blade Type, belt drive, without motor. 1-Weismann Centrifugal Pump 1 1/2" size with 5 H.P. Motor attached. 1-Model 8-6 Sparkler Horizontal Plate Filter, with 1/2 H.P. Motor. 1-Simplex Vacuum Steam Cooker with motor 200-lb. size, lower kettle approx. 24" x 24". 1-Remelt Kettle cast iron, good condition, without motor. 1-National Slicer No. 63, with 1/2 H.P. Motor, for Coconut Nougats etc. 1-Thomas Mills Bon Bon Center Machine, Table Model, Motor Driven, rolls 8" in diam. 12" long. 1-60-gal Burkhard Nougat Kettle, complete with 7 1/2 H.P. motor, Reeves drive. 1-Pop Cello Wrap Machine, hand feed, heat seals Cello around stick, good condition. 1-Nut Blancher. Walter Williams Candy Co., Oklahoma City, Okla.

FOR SALE: Mills 6" Candy Cane Machine. Automatically hooks and cuts canes. Motor driven with 5" conveyor belt. Used only three months. \$1000 for immediate cash sale. Box 566 The MANUFACTURING CONFECTIONER.

FOR SALE: Sandvik stainless steel Belt, 30" wide, 55' long; 50" Economy Tunnel, 32" wide, with compressor. Box 661 The MANUFACTURING CONFECTIONER.

FOR SALE: Fitzpatrick Model D Communitator; Rose 500 Machine, 1/2" x 1 1/4"; TLA Machine used very little. Box 662 The MANUFACTURING CONFECTIONER.

FOR SALE: 22-B individual piece Wrapper; CA-2 Chocolate Wrapper; FA Package Wrapper; Hudson Sharp 2W6 Wrapper, straight infeed, for 1c cane. Box 663 The MANUFACTURING CONFECTIONER.

FOR SALE: Racine Super Duplex Sucker Machine, excellent condition; also Simplex Steam Vacuum Cooker; Hudson Sharp 2W6, side feed, for bar 1-1/4" x 3/4" x 3/4". Box 664 The MANUFACTURING CONFECTIONER.

MACHINERY WANTED

WANTED: Roll Card Feed Units for DF and DF 1 Wrapping Machines. Paul F. Beich Co., Bloomington, Illinois. Phone 3-8201.

WANTED: Used, National or Greer Chocolate Enrober, complete with tunnel, either 24", 32" or 34". State age, condition and best cash price. Falcon Nut & Candy Co., 448 N. 60th St., Philadelphia 31, Pa.

HELP WANTED

WANTED: CANDY MAKER, capable of supervising help, experienced in cream and slab work. Medium sized factory in Phila. area. Secure position for right man. Box 563, The MANUFACTURING CONFECTIONER.

WANTED: ENROBER MAN, experienced in production of top quality Miniature Chocolates, able to handle non-automatic tempering, adjust tunnels etc. New York City. Box 885 The MANUFACTURING CONFECTIONER.

CHEMIST

College graduate, with degree in Chemistry or Pharmaceutical field. Experience in hard candy development or production. Age 28-35. Progressive company located in mid-South. Write full particulars.

Vick Chemical Co.
P.O. Drawer V
Greensboro, N. C.

REPRESENTATIVES WANTED

Established quality line open for manufacturer's representatives in Michigan, Wisconsin, Minnesota, Indiana, Kentucky, Maryland, Delaware, and D. C. Specialty candy line, sells to department stores, quality candy retailers. Regular line sells September through May, with specialties for all holidays. Smaller territories preferred. We also need aggressive man to introduce this line in North and South Dakota. Replies confidential. Box 565 The MANUFACTURING CONFECTIONER.

POSITIONS WANTED

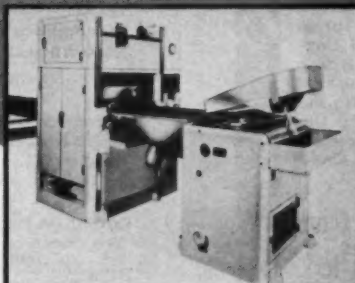
FOREMAN, now employed wishes to make a change. 30 years experience in general candy pan line, and technologist in Bubble Chewing Gum Base. Top quality finishing and 100% high humidity resistance. Also will go to teach anywhere in foreign countries. Will furnish highest grade references from this state and foreign countries. Box 272 The MANUFACTURING CONFECTIONER.

SPECIAL OFFERINGS

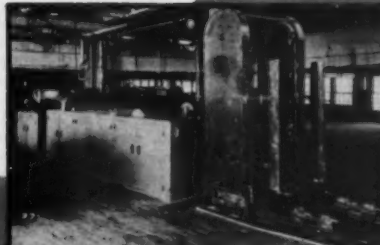
At Sensational Savings

Rebuilt and Guaranteed for Complete Satisfaction

Act Now For Choice Selection



National Equipment 24" Bon Bon Enrober. Used less than 1 year. All parts which come in contact with the coating material are made of stainless steel. Available with new machine guarantee.



Very latest National Equipment M-100 Automatic, Streamlined, Heavy Duty Steel Mogul with D-100 Depositor. Ball bearings, forced feed lubrication, entirely framed with covers, explosion proof motors. Also with Currie Automatic Loader, Currie Automatic Stacker.



Latest type Greer 24" Coater, Style CG. Complete with Automatic Feeder, 3 sets of bars with Tempering Control, Compressor, Bottomer, 10 ft. Table, Latini Decorator and Cluster Attachment. Also with 24" Multi Tier, 6 top Tiers, 15 ft. packing table.



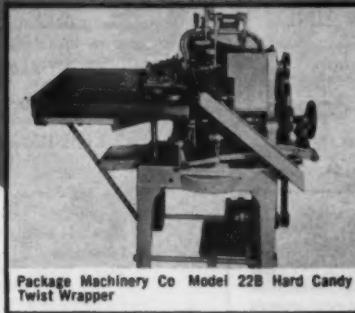
Bullerjahn Starch Conditioner, Heater, Cooler, with Starch Cleaner. Excellent for conditioning starch and conveying starch automatically to and from Mogul.

Over 5000 Machines in Stock
Every type, Every capacity.
For every need
TELL US YOUR REQUIREMENTS



Latest type Forgrove Model 26-D Universal Fold Wrappers for foil, cellophane, wax wrapping. Speed - 100 to 120 per minute.

Quantities Are Limited



Package Machinery Co Model 22B Hard Candy Twist Wrapper

Partial List of Specials Available

Late type National Equipment 34" Enrober, complete.
Hohberger Continuous Automatic Cream Machine, complete.
National Equipment 2000 and 1000 lb. underneath driven Chocolate Melters.
24 - 38" Revolving Pans, with and without coil and ribs.
Simplex Steam Vacuum Cooker.
Racine Model EP Sucker Machine.
Gaebel Continuous Plastic Forming Units with full selection of Dies.
Racine Snowplow 5 ft. Cream Beater.

Package Machinery Co. DF1 bar or package Wrapper with Electric Eye.

Package Machinery Co. FA2 Wrapper with Electric Eye, 7 ft. Chain Infeed Conveyor; Overhead Chain Conveyor.

Lynch Model RA Wrap-O-Matic bar or package Wrapper with Electric Eye.

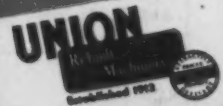
Hudson Sharp Campbell Wrappers. Models 2W6, 2W8, and 2W10. Both with and without Electric Eye.

Visit our Booth No. 49
at the
N. C. A. Confectionery Exposition
June 11-14 Mechanics Hall, Boston

Union Confectionery Machinery Co., Inc.

118-322 Lafayette St.
New York 12, N. Y.
CAnal 6-5333-4-5-6

167 N. May St.
Chicago, Ill.
Sauls 2-7845



MISCELLANEOUS

FOLDING CANDY BOXES: All sizes carried in stock for prompt delivery. Plain, Stock Print or Specially printed. Write for our new catalog of Every-Day and Holiday Fancy Boxes, and all Paper Products used in the manufacture and packaging of candies. **PAPER GOODS COMPANY, INC.,** 270 Albany Street, Cambridge 39, Mass.

Midwest Specialty Candy Manufacturer wishes to work with Eastern Manufacturer on a consolidated advertising and warehousing program. References exchanged in strict secrecy. Box 665 The **MANUFACTURING CONFECTIONER.**

Large long established machinery firm with wide distribution and complete manufacturing facilities interested in new ideas for improvement and/or increasing candy products production. Will pay for any patentable ideas or working machine which we can market. Please write information. Confidential. Box 666 The **MANUFACTURING CONFECTIONER.**

WE BUY & SELL

ODD LOTS • OVER RUNS • SURPLUS

"Cellophane" BAGS

SHEETS • ROLLS • SHREDDINGS

Cellophane rolls 100 ft. or more

ALSO MADE OF OTHER CELLULOSE FILM
Glassine Bags, Sheets & Rolls

Diamond "Cellophane" Products

Harry L. Diamond Robert L. Brown
"At Your Service"
74 E. 28th St., Chicago 14, Illinois

Subscribe to THE MANUFACTURING CONFECTIONER

Only \$5 for 2 years, \$3 for 1 year
in U. S. and Canada. Only \$7.50
for 2 years, \$5 for 1 year in other
countries.

- Feature Articles
 - Candy Clinic
 - Candy Packaging
 - Candy Equipment Preview
 - Technical Literature Digest
 - Manufacturing Retailer
 - Book Previews
- And many other features

418 N. Austin — Oak Park, Ill.

SCIENCE AND SUGAR

In the field, and in the laboratory, men are using Science to produce increased-yield varieties of sugar cane and beet . . . to create more fertile and productive soil. And in the area of purchasing and distribution, Science is keeping pace with the quality and yield advances of product. Here at Charles Fuchs & Co. we have replaced the rule of thumb with intensive market analyses . . . utilizing the most up-to-date methods of research and statistics. We direct the Science of market study to our clients' present and anticipated Sugar needs . . . satisfying their most exacting requirements and at the same time providing the best possible purchase price. Call on us. Compare our service.

CHARLES FUCHS & CO.
SUGAR BROKERS
120 Wall St., N. Y. 5, N. Y.
Bowling Green 9-7171

Member
N. Y. Coffee & Sugar Exchange, Inc.

CODE DATE your
CANDY BAR WRAPPERS
on your wrapping machine!

PRINT your CARTONS
and SHIPPING CASES
RIGHT ON
your CONVEYOR LINE

Write for information

KIWI® CODERS CORP.

3004-08 N. Clark St., Chicago 13, Ill.



STANcase
EQUIPMENT

**STAINLESS STEEL
DRUMS**

MODEL 30--30 GAL.
MODEL 55--55 GAL.
(Covers available)

**ECONOMY
EQUIPMENT**

RUGGEDLY CONSTRUCTED FOR LIFE TIME WEAR.
FULLY APPROVED BY HEALTH AUTHORITIES.

Manufactured by
The Standard Casing Co., Inc.
121 Spring St., New York 12, N. Y.

Confectionery Brokers

HERBERT M. SMITH

318 Palmer Drive
NO. SYRACUSE, NEW YORK
Terr.: New York State

W. E. HARRELSON ASSOCIATES

Candies Only
5308 Tuckahoe Ave.—Phone 67-2038
Richmond 26, Va.
Territory: Virginia, West Virginia,
North and South Carolina.
Five Associates:
Nelson I. Bowden, Lloyd C. Fulmer,
Wm. F. Dawson, W. E. Harrelson,
N. A. Ligon.
Specializing on Chains, Varieties,
and Super-Markets, and Conf. and
Tobacco Jobbers.

SAMUEL SMITH

2500 Patterson Ave. Phone 22316
Manufacturers' Representative
WINSTON-SALEM 4, N. CAR.
Terr.: Virginia, N. Carolina,
S. Carolina

FRANK Z. SMITH, LTD.

Manufacturers Sales Agents
1500 Active Distributors
Box 24, Camp Taylor
LOUISVILLE 13, KENTUCKY
Terr.: Kentucky, Tennessee and
Indiana

FELIX D. BRIGHT & SON

Candy Specialties
P. O. Box 177—Phone 8-4097
NASHVILLE 1, TENNESSEE
Terr.: Kentucky, Tennessee, Ala-
bama, Mississippi, Louisiana

**G & Z BROKERAGE
COMPANY**

New Mexico—Arizona El Paso
County Texas
P. O. Box 227 **ALBUQUERQUE**
N. Mex.
Personal service to 183 jobbers,
super-markets and department
stores. Backed by 26 years experi-
ence in the confectionery field. We
call on every account personally
every six weeks. Candy is our busi-
ness.

**LIBERMAN SALES
COMPANY**

324 Joshua Green Bldg.
1426 Fourth Ave.
SEATTLE 1, WASHINGTON
I. Liberman Cliff Liberman
Terr.: Wash., Ore., Mont., Ida.,
Utah

HARRY N. NELSON CO.

546 Folsom Street
SAN FRANCISCO 7, CALIF.
Established 1906
Sell Wholesale Trade Only
Terr.: Eleven Western States

**RALPH W. UNGER &
RICHARD H. BROWN**

923 East 3rd St.
Phone: MU. 4405
LOS ANGELES 13, CALIFORNIA
Terr.: Calif., Ariz., N. Mex.,
West Texas & Nevada

y

ES

38

ia.

er,

n,

es,

nd

s

.

N

.

e

re.

nt

uri-

We

lly

si-

uan

0.

IA

IONER

Ambros
America
Anheuse
Armour
Atlas P

Beich, M
The Be
Blanke-
Presen
Burke R
W. J. B

Californ
Excha
Clinton
Corn Pr

Dodge
P. R. D
Durkee

Felton

The Alu
Comp

Baywood
Buhler
Burns, J
Burrell

Carle &
Fred S.
Cincinnati

.....
Confecti
Corrigan
Currie M

America
Bakelite

Battle C
Inc.

Clark, J.
Continen
Cooper I

Daniels
Diamond
Dow Ch

C. G. G

Hayssen

for Jun



Advertisers' INDEX

Advertisements of suppliers are a vital part of the industrial publication's service to its readers. The following firms are serving the readers of *The Manufacturing Confectioner* by placing their advertisements on its pages. The messages of these suppliers are certainly a part of the literature of the industry. Advertising space in *The Manufacturing Confectioner* is available only to firms supplying equipment, materials, and services for the use of confectionery manufacturers.



RAW MATERIALS

Ambrosia Chocolate Co.....	25	Fritzsche Brothers, Inc.....	8	The Nulomoline Div. American Molasses Co.	64
American Maize-Products Company	97	Chas. Fuchs & Co.....	104	Penick & Ford, Ltd., Inc.....	84
Anheuser-Bush, Inc.	87	Gunther Products, Inc.....	Apr. '56	Pzer, Chas., & Co., Inc.	Second Cover
Armour & Company.....	31	Hooton Chocolate Co.....	92	Emil Pick	92
Atlas Powder Co.....	21	Hubinger Company	106	Polak & Schwarz.....	May '56
Beich, Paul F. Co.....	89	Walter H. Kansteiner Company....	94	Refined Syrups & Sugars, Inc.....	11
The Best Foods Co.....	22	Kohnstamm, H., & Company, Inc..	32	Senneff Herr Co.....	92
Blanke-Baer Extract and Preserving Company	73	Merckens Chocolate Company, Inc.	40	Staley, A. E., Mfg. Company..	May '56
Burke Products Co., Inc.....	17	Merrill Lynch, Pierce, Fenner & Beane	37	Standard Brands, Inc.....	93
W. J. Bush & Co.....	93	National Aniline Division, Allied Chemical & Die Corp.....	May '56	Stange, Wm. J., Co.....	83
California Almond Growers Exchange	7	Nestle Company, Inc., The.....	14, 15	Sterwin Chemicals, Inc.....	3
Clinton Corn Processing Company.	29	Norda Essential Oil and Chemical Company, Inc.....	Fourth Cover	Union Sales Corp.....	107
Corn Products Sales Company.....	91	Nu Coat Bon Bon Company.....	9	Van Ameringen-Haebler, Inc.....	16
Dodge & Olcott, Inc.....	May '56			Western Condensing Co.....	85
P. R. Dreyer, Inc.....	13			Whitten, J. O. Company, Inc.....	19
Durkee Famous Foods.....	May '56			Wilbur-Suchard Chocolate Company, Inc.....	75
Felton Chemical Co.....	44				

PRODUCTION MACHINERY AND EQUIPMENT

The Aluminum Cooking Utensil Company	24	The Girdler Company.....	Apr. '56	Racine Confectioners' Machinery Co.	54
Baywood Mfg. Co., Inc.....	26	Greer, J. W., Company.....	27	Savage Bros. Co.....	82
Buhler Brothers, Inc.....	30	Hansella Machinery Corp.....	4	Sheffman, John, Inc.....	71, 86, 101
Burns, Jabez & Sons, Inc.....	76	Lehmann, J. M., Company, Inc....	10	Standard Casing Co., Inc., The....	104
Burrell Belting Co.....	May '56	Mikrovaerk A/S	23	Stehling, Chas. H., Co.....	May '56
Carle & Montanari, Inc.....	18	Molded Fiberglass Tray Company	Mar. '56	Taylor Instrument Co.....	12
Fred S. Carver, Inc.....	39	National Equipment Corp.....	99	Union Confectionery Machinery Co., Inc.	103
Cincinnati Aluminum Mould Co.....	May '56	Niagara Blower Company.....	May '56	Vacuum Candy Machinery Co....	54
Confection Machine Sales Co.....	May '56	Oakes, E. T. Corporation, The....	28	Voss Belting & Specialty Co.....	20
Corrigan, J. C., Inc.....	85				
Currie Machinery Company.....	May '56				

PACKAGING SUPPLIES AND EQUIPMENT

American Viscose Corp.....	46	Hudson-Sharp Machine Co.....	50	Rhineland Paper Company.....	59
Bakelite Company	51	Ideal Wrapping Machine Company	89	Stuyvesant Engineering Company	Apr. '56
Battle Creek Packaging Machines Inc.	Apr. '56	Industrial Marking Equipment....	50	Supermatic Packaging Corp.....	56, 57
Clark, J. L., Co.....	48	Kiwi Coders Corp.....	104	Sweetnam, George H., Co.....	70
Continental Can Company.....	May '56	Lassiter Corporation	Apr. '56	Taft, R. C., Co.....	82
Cooper Paper Box Corporation.....	62	Lynch Corporation, Packaging Machine Division	52	Tompkins' Label Service.....	May '56
Daniels Manufacturing Co.....	May '56	Milprint, Inc.....	53	Traver Partition Corp.....	65
Diamond "Cellophane" Products...	104	Monsanto Chemical Co.....	Mar. '56	Triangle Packaging Machinery Co.	Feb. '56
Dow Chemical Co., The.....	63	Murnane Paper Co.....	58	Visking Corporation	60
C. G. Girolami & Co.....	Apr. '56	Olive Can Company.....	May '56	Woodman Company, The.....	47
Hayssen Manufacturing Co.....	61	Package Machinery Co.....	Apr. '56	Wrap-King Corp.	66



Get
EXTRA QUALITY
at
NO EXTRA COST
with
CONFECTIONERS'
CORN SYRUP

You *get* that *extra Quality* you're looking for, in corn syrup made from the *finest corn grown in the corn state* and processed by the most modern of production facilities.

You *always get* that *extra Good Taste and Texture* your customers look for, from either OK REGULAR CORN SYRUP or OK HIGH DEXTROSE CORN SYRUP because they're meticulously "quality controlled." Try these other famous OK BRAND products for confections, too: OK THIN BOILING STARCHES and OK MOLDING STARCHES.

OK confection experts and installation engineers are always available to help you use OK products more profitably . . . to help you design and install money saving storage and automatic handling systems.

Let OK TECHNICAL SERVICE and OK PRODUCTS help you give your confections *extra quality at no extra cost*. Phone for a Hubinger confection expert or installation engineer to come and talk with you about your problems, without obligation. You'll find them OK too.

75 years of making quality products from corn

THE HUBINGER CO.

1881
1956

KEOKUK, IOWA

NEW YORK • CHICAGO • LOS ANGELES • BOSTON • CHARLOTTE • PHILADELPHIA

THE MANUFACTURING CONFECTIONER

FOR

SWEETS THAT SELL!

THROUGH INGREDIENT UNIFORMITY

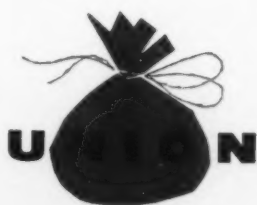


With a wonderland of tempting "goodies" before her, she makes *one* choice! Why *this* particular sweet over all the rest?

Eye-appeal, flavor goodness and smooth texture are factors which have influenced her decision. Be certain when fingers point, they point at your product. Rely on the controlled uniformity and high quality of Union's *Confectioners' Starches*,

Corn Syrup Unmixed and *Caramel Colors* for your confectionery products!

Our Sales Service Department will be happy to assist you with any technical problems. There's no obligation, of course!



SALES CORPORATION

Distributor for UNION STARCH & REFINING COMPANY

COLUMBUS, INDIANA



No other spray-dried flavors are more carefully guarded than Norda Nodes, to insure complete excellence, from starting spray to finished powder.

**Nothing's known
like Norda Nodes
... Spray-dried
for you by Norda**

Producing just-ordinary spray-dried flavors never would have interested Norda. That is why Norda developed Norda Nodes, and why Norda Nodes come only from Norda.

Norda men are flavor experts. It took their years of experienced skills to create the methods, help devise the machines, that make Norda Nodes possible.

Here are your true-fruit flavors, with every rich, real flavor essential locked ingeniously in tiny, colloid-coated "grains", that instantly flood foods with flavor when dry mixes are liquefied.

Uniform product flavor results. Flavors stay fresh and changeless, through much longer shelf life, and storage. Norda Nodes carry your quality through, from you to your customers.

Send your letterhead today for *free samples*.

"Flavor it with a Favorite"— Norda Nodes

Norda

Norda, Inc.

601 West 26th Street, New York, N. Y.

• LONDON • PARIS • GRASSE • MEXICO CITY

